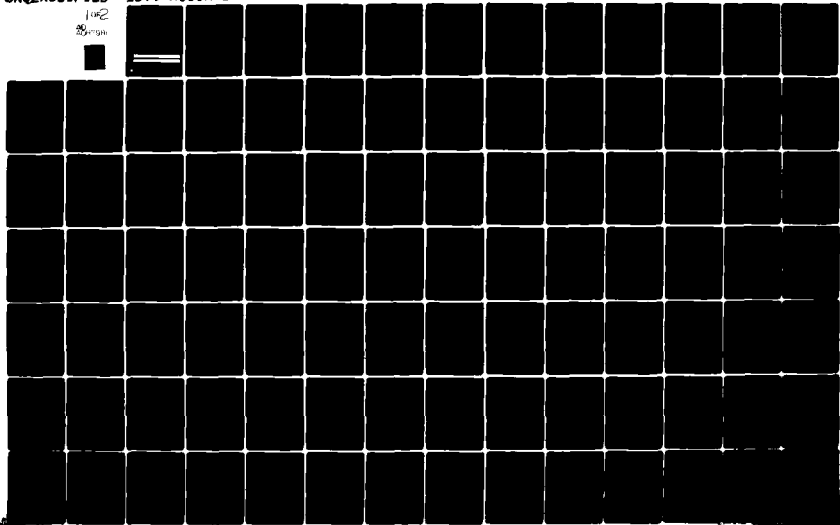


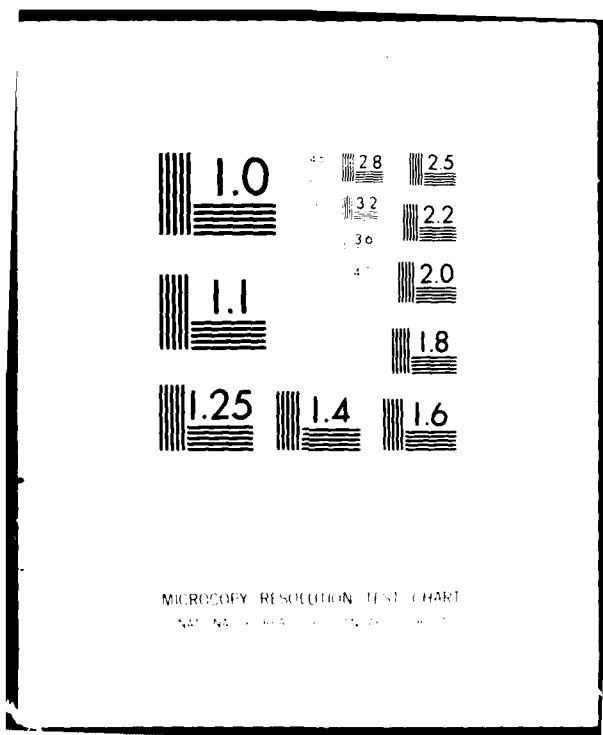
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Final Report

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ORGANIZATION AND MANIPULATION
OF INFRARED SCENE DATA AND
INFRARED MODELING

November 1979

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ABSTRACT


This report documents the work performed by Teledyne Brown Engineering in the organization, classification, and manipulation of infrared scene data for the U.S. Army Missile Command (MICOM) Advanced Sensors Directorate.

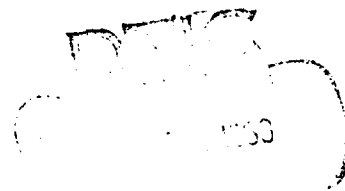
Software was developed for a PDP 11 computer with an on-line GRINNELL television imaging system to aid in classifying infrared scenes and extracting targets from such scenes.

The storage and retrieval of the scene classifications was automated by the development of a data base and data base manager.

The manipulation of the data included the calculation of power spectral densities and autocorrelation functions, the cross-correlation of targets with selected classes of background scenes, the application of a whitening filter based on the power spectral density of the background class, and the cross-correlation of two sensor FOV (field of view) models with the target scenes and background scenes.

APPROVED:


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FINAL REPORT

SD79-MICOM-2387

9) Final Rpts.

6) ORGANIZATION AND MANIPULATION OF INFRARED
SCENE DATA AND INFRARED MODELING.

12) 11/11/79

11) Nov 71

By

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Rhett/Burton, Ph.D.

November 1979

Prepared For

U.S. ARMY MISSILE COMMAND
ADVANCED SENSORS DIRECTORATE
REDSTONE ARSENAL, ALABAMA

15) Contract No. DAAK40-79-C-0068

Prepared By

SYSTEMS DIVISION
TELEDYNE BROWN ENGINEERING
HUNTSVILLE, ALABAMA

4-11-76

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1. INTRODUCTION

This final report constitutes the completion of work on Contract No. DAAK40-79-C-0068 by Teledyne Brown Engineering (TBE) for the U.S. Army Missile Command (MICOM) Advanced Sensors Directorate.

This contractual effort has involved the organization and classification of infrared scene data and the development of a CRT display capability for scene data. This display capability should greatly facilitate working with the scene data in the future. A number of manipulations were performed on this scene data to investigate its characteristics and augment infrared modeling. These include, in addition to the development of power spectral densities and autocorrelation functions, the extraction of targets from infrared scenes, the cross-correlation of targets with background ensembles from selected classifications, and the application of a whitening filter based on the power spectral density. Other manipulations include the generation of model scenes and model target masks.

These technical efforts are summarized in Section 2 and described in detail in Section 3, which is complete with tables and computer output. Section 2 also contains recommendations for future efforts. An analysis of the potential impact of various errors which might be in the data is given in a separately published appendix.

2. SUMMARY AND RECOMMENDATIONS

Infrared scene data requires a large amount of storage space within a computer system. This combined with the quantity of data frames available for this effort created an information storage and retrieval problem. The approach taken was to develop computer software that would be a compromise between retrieval time and storage space. In the data base developed for this effort, the actual infrared scenes were stored on magnetic tape in a compact, easy-to-unpack format. This solved the problem of storage space and represents a good compromise between scene retrieval time and storage space. The scene descriptions and magnetic tape location information that requires smaller storage space were maintained on disk files with fast retrieval times. The success of the current data base and manager suggests that it be used as a model to develop a standard data base of all infrared scenes available to the Advanced Sensors Directorate.

A standard tape format should be established to allow storage of variable size scenes. A utility subroutine could then be written to unpack the standard tape for users.

The data base should reside in parallel on the CDC 6600 and PDP 11 computer systems to have all computer resources available for analysis.

The individual frame descriptions in the current data base should be reviewed for completeness.

All data taken by advanced sensors should be classified and entered into the data base on the PDP 11 computer. This would require only a scene editor to be incorporated into program HAPAN2. All data tapes from other sources should be repacked into the standard tape format and entered into the data base on the CDC 6600 computer system. This system has more flexibility in tape drives and formatting possibilities.

Compatibility between the PDP and CDC computers has to be solved. Methods must be developed that allow updates to the data base made on one computer to be transferred to the other.

Procedures should be developed to record problems that users discover in the data or data base.

3. PROCESSING AND HANDLING OF INFRARED SCENE DATA

3.1 PRELIMINARY CONSIDERATIONS

The cross-correlation studies involve the cross-correlation of target scenes with specific classes of background scenes. This study required several tasks. The first was to locate target body boundaries and extract the target from its background.

The next problem was to classify individual frames of data and organize them into background classes. The next task was to develop the ability to recall these frames by classification.

The large volume of available data required the automation of classifying and recalling data frames. This was accomplished by using a GRINNELL Systems graphic television imaging system to aid in classifying the individual frames. The classification information was input to the CDC 6600 computer and recorded in a data base. A data base manager was developed to handle the data base and allowed recalling data frames by classification.

3.2 DATA

The data available for analysis was originally organized in a user tape library on the CDC 6600 computer system. This tape library and the data within it is explained in TBE Report No. SD78-MIRADCOM-2257.* A quick review from this report of the data and the organization of the tape library is given below.

Digital data tapes containing thermal infrared scenes were furnished by U.S. Army MICOM's Advanced Sensors Directorate.

The data in each scene are stored sequentially by scan lines. Each element (pixel) of the scene is referenced by scan line and line

* J. B. Rainey, "Infrared Background Clutter Analyses and Model Development," Teledyne Brown Engineering Final Report No. SD78-MIRADCOM-2257, September 1978

element number. The pixel value is related to scene radiance and is in digital counts with a range of 0 to 1,024.

The data tapes were divided into two major groups according to the data source. The major groups were then subdivided by geographical areas and then further subdivided and classified by flights.

The first group consists of data taken by the Environmental Research Institute of Michigan (ERIM). These data were taken by a radial scanner at a 90-deg vertical angle. There were 11 flights over 4 geographical areas: Jackson - Camp Lejeune; Plymouth; Guelph, Ontario; and Willow Run Airport.

The second group consists of data taken by the U.S. Army with two AGA thermovisions (3- to 5- μ m and 8- to 14- μ m wavebands). The data were taken at a 90-deg vertical aspect from a helicopter flown at 1,000 ft. A video tape was made with each flight for documentation. The flight IRIG time was recorded on the video tape and each frame of the digital tape for reference. A detailed description of the data-gathering technique is given in U.S. Army MIRADCOM's Report No. TE-77-11.* The 18 flights of this group were subdivided into 5 sections: early flights over Redstone Arsenal, flights over Aberdeen Proving Grounds (APG), flights over Ft. Hood, FAWS preflight (Redstone Arsenal), and FAWS flights over Redstone Arsenal.

The formats for this library are reprinted in Table 3-1 and Table 3-2. The tape library is given in Table 3-3.

The condition of the tape library was determined by using program VARFY.

VARFY printed a concise, one-line description of each frame on a tape. The description consists of IRIG time; number of zero pixels; number of pixels with value greater than 1,023; number of pixels with values

* C. F. Hester, "Wiener Spectra Data Analysis for Infrared Background Modeling," U.S. Army Missile Research and Development Command, Technical Report No. TE-77-11, April 1977

equal to 1,023; minimum, maximum, mean, and standard deviation; and the number of nonzero lines within the frame.

Eighteen tapes from the original tape library were processed. These include data taken from flights over Aberdeen Proving Grounds and Ft. Hood, as well as FAWS preflight data. These results confirmed that the original tape library was in good condition.

These runs also produced a hardcopy record of each frame that was available for analysis.

The new AGA thermovision data taken by the U.S. Army is now digitized by a TELEVENT system on the PDP 11 computer system and recorded on magnetic tape. The format for each record of these digital tapes is given in Table 3-4.

The data on these tapes are raw digitized data from the TELEVENT system and are not organized in a compact, easy-to-decode format.

Each record represents data from 21 scan lines. Each thermovision frame is terminated by four to six filler lines that are differentiated from true scan lines by the two least significant bits of their line sequence number, which is equal to three. The data in the filler line are set to one bit, and the line sequence numbers are set to maximum values.

All true scan lines between two sets of six filler lines constitute a thermovision frame. The first group of these scan lines read from the tape represents the bottom of the infrared scene and the last group of scan lines read represents a retrace of the top of the infrared scene. This situation generates problems such as duplicate scan lines when the original and retrace overlap and missing scan lines when there is no overlap. The IRIG time of each scan line within a tape record is recorded in a 36-bit word containing a time bit code. This code is given in Table 3-5.

Program UNPKTV was developed to repack the new AGA thermovision tapes into the same format as the thermovision tapes in the original

tape library. The program was written for the CDC 6600 computer system, and later a version was converted to the PDP 11 computer.

Program UNPKTV performs the following tasks:

- Decodes the line IRIG times and stores sequentially. If time is in error, the source data is printed in octal and time is set negative.
- Decodes the line sequence numbers
- Tests the two least significant bits of line numbers to identify scan lines to be discarded
- If scan lines are legitimate (not discarded), repack 100 data points of scan line into 20 CDC words and store in table with an index equal to the line sequence number.
- If line sequence number is a duplicate, the scan line is stored in a linked list table of duplicate scan lines.
- The following information on each scan line is recorded:
 - ▲ Number of pixels that equal zero
 - ▲ Number of pixels that equal 1,023
 - ▲ Number of pixels that are greater than 1,023
- To solve the problem of duplicate sequence numbers, a group sequence number is generated for each line. A group is a set of lines that is in sequence. The group sequence number is the number of lines within each group.
- The above operations are terminated if two or more consecutive discardable lines are located.
- The table of scan lines is now searched for missing and duplicate line numbers.
- All missing line numbers are printed.
 - ▲ Line number with highest group sequence number without error (error = pixel greater than 1,023) is chosen.

- ▲ If none of the duplicates meet this test, it is treated as a missing line number.
- ▲ If line is selected, it is compared with each duplicate and the number of equal CDC words are printed.
- The following acceptance criteria are set for each frame:
 - ▲ There must be more than 60 scan lines per frame.
 - ▲ Number of zero pixels must be less than 5,000.
 - ▲ Number of pixels greater than 1,023 must be less than 5,000.
 - ▲ There must be no more than three missing sequence numbers.
- If the above criteria are met, the frame is zero filled to 100×100 and output to the new tape with format as stated in Table 3-2.
- The header table is loaded accordingly:

Words 1-5	Frame start time in IRIG milliseconds CDC floating point format
Word 15	Number of actual data lines
Word 20	Number of zero-valued pixels
Word 25	Number of pixels equal to 1,023
Word 30	Number of pixels greater than 1,023
Word 35	Number of missing data lines
Word 40	Minimum pixel value
Word 45	Maximum pixel value.
- The remaining IRIG line times from the last record read are adjusted, and the process is repeated for the next frame.
- If an end of file (EOF) is encountered before the six filler lines are encountered, the data are discarded and the process is restarted.
- The program terminates on two consecutive EOFs.

3.3 DATA MANAGEMENT

The first task in the data management process was the classifying of individual data frames.

This was originally accomplished by viewing the documentation video of the AGA thermovision data acquisition flights. This process was improved by generating a 9-track, 16-bit-word-length tape for the EAI PACER 600 system and displaying each frame in color graphics. The thermal image was recorded on video tape and compared to the flight video tape. Program UNPACK from TBE Report No. SD78-MIRADCOM-2257 was modified to produce the 9-track tape.

Five data tapes containing approximately 2,000 frames were classified with the technique described above. The classification of each frame was recorded on the frame tables generated by program VERIFY.

A data base was then created for the tape library of thermal infrared scenes.

Program CLS was developed to solve the problem of getting each frame classification into the computer and building a disk file for the data base.

Each frame was classified by the set of classification codes given in Table 3-6.

The resulting data base contains the classification and storage location for each scene or frame within the tape library. The following information is recorded for each frame.

- Physical classification of the scene and message on special frames
- Flight IRIG time
- Tape serial number
- Flight or test title

- Frame or record location on the digital tape
- Scene mean
- Scene standard deviation
- Number of zeros within the frame
- Number of bad data points within the frame
- Minimum scene value
- Maximum scene value.

Table 3-7 describes the data base disk file.

A data base manager was developed, which allowed a user to retrieve information on any frame in the data base. The user communicates with the manager by entering a set of task mnemonics. The basic tasks of the manager are divided into three categories: print, build, and update.

The task mnemonics with their options and duties are given in Table 3-8.

3.4 TARGET EXTRACTION

Program TRG was developed as a first attempt to locate target body boundaries and extract the target from the background scene.

Program TRG uses the following technique to locate the target boundaries within a scene. The target size and vertexes in relation to the target hot spot are input. The program converts the target vertexes to polar coordinates with the hot spot at the origin. The program builds rotation lookup tables of pixel coordinates that are changed from background to target pixels as the target boundaries are rotated 360 deg. The coordinates in this table have the origin at the hot spot.

The program now loops on thermal scenes of the target and performs the following tasks on each. The scene maximum, assumed to be the target hot spot, is located. A perimeter is generated around the hot spot at a distance equal to the maximum dimension of the target.

All pixels within this perimeter that are not within the target boundaries make up the adjacent background. The pixels outside the perimeter make up what is called the perimeter background. This perimeter background does not contain any target pixels as the target is rotated about its hot spot.

A histogram of the perimeter background is developed, and a histogram of the adjacent background is determined using the rotation lookup tables. The sum of the absolute differences between the perimeter and adjacent histograms is calculated as an error term for each rotation. The lowest error term is then selected as the target orientation.

Program TDB was developed to generate a target data base. Inputs to this program are the target frame IRIG time and the row, column target boundaries for the target within the frame.

TDB extracts the target and calculates the background mean. It then packs the IRIG time, mean, and target pixels into a compact format and stores these data on a disk file.

Program STDBM was developed to access the file generated by TDB and to produce a model target scene or a target mask scene.

A model target scene is a 100- by 100-pixel scene, with the target pixels centered. All pixels that are not target pixels are set to the background mean value recorded on the target data file.

A target mask scene is the same as a model target scene except that the target pixels are set to one and the background pixels are set to zero.

3.5 GRINNELL SYSTEM

A graphic television imaging system by GRINNELL Systems is now a peripheral on the PDP 11 computer system. Time was devoted to learning and developing software for this system. This allowed the system to be used in extracting targets and classifying thermal images.

Program JOHN2 reduced the time required to learn the system. This program allows the user to operate the GRINNELL system in the demand mode on a machine language level. Each command in the GRINNELL instruction set was given an index, and this allowed the user to execute a specific instruction by entering its index. The program would interrogate the instruction and ask for the command options in either integer, octal, or alphanumeric formats.

Program HAPAN2, a PDP-11 version of UNPKTV, was developed to unpack a TELEVENT tape by frames and display the scene on the GRINNELL. An editing package will be developed to clean up the image. The operator can then classify the image and input the classification key. The program will then store the key in the image data base.

DMCLT, a demand mode color threshold service routine, was developed. This routine allows the user to dynamically set the color levels in an image that is displayed on the GRINNELL.

The routine operates in two loops. The first loop is a control loop that allows the user to input a color. The color is input with a 15-bit octal number in which the 12 low order bits control color. Of these 12 bits, the 4 low order bits control blue, the 4 mid-order bits control green, and the 4 high order bits control red. The selected color is then displayed on the screen. If the user wishes to choose another color, he can simply enter another color or enter one of the following control keys:

- 77777 - accept last color and go to thresholding loop
- 66666 - back up on the color scale and reenter color scales
- 55555 - exit program.

The second loop or the threshold loop allows the user to set the intensity level for the current color by moving the cursor (in the track mode) up or down on the screen. All intensities above the cursor line

position and below the last threshold setting will be set to the current color. A scale from 0 to 240 is written from the bottom to the top of the screen to give the operator an approximate intensity level reading. To exit this loop, the operator turns the track mode off, homes the cursor, and depresses the enter switch. The color level is now set for this color, and the user is returned to loop one.

GQPLT was developed to generate a quick X-Y plot on the GRINNELL. No axis is drawn and points are connected with a solid line. It is optional to erase the plotting surface area and to scale the data.

GERS was developed to erase selected rectangular areas of the screen.

Subroutine GTL loads common block/GRCMD/with the 24 command instructions for the GRINNELL.

Subroutine BNDRY was developed to allow the user to trace a boundary with the cursors and store the coordinates of the boundary. The user has the option of plotting the current scan line before entering the coordinate. Under this option, the user positions the cursor on the scan line he wants and depresses the enter switch. The scan line will be plotted below the image. This plot can be used to position the cursor in the element direction. The element coordinate will be recorded when the enter switch is depressed. To exit this loop, the operator homes the cursor and depresses the enter switch. The program then calls GQPLT and draws a solid boundary by connecting all of the coordinates. The user then has the option to reenter the coordinates. If reentering is not selected, the program extracts the coordinates of every point on the solid line and packs them in an array by scan line and pairs of start-stop element numbers. This array is passed in common block/BOUND/.

Program GPACK3 was developed to extract targets and store them in a compact target file format. The program locates a specified frame according to IRIG time, unpacks the frame, and displays the image on the GRINNELL with the size of each pixel doubled. The user can input a linear scale factor to increase or decrease the intensity level of the image.

The program then calls DMCLT, which allows the user to threshold the target. Subroutine BNDRY is then called. This allows the user to trace the target boundary using the cursor. GPACK3 then uses the target coordinates furnished by BNDRY to extract the target pixels. It then erases the screen and displays the target. The user can return to step one and repeat the target extraction process or accept the target already processed. GPACK3 then packs the target pixels in a standard format and stores them on a disk file.

3.6 CORRELATION STUDIES

The cross-correlation function was used to compare targets with different classes of backgrounds. The mean count of the scene was subtracted from each pixel in the scene and the correlation surface was normalized by the target standard deviation. The distribution function was generated to study the statistics of the cross-correlation surfaces.

Program CORR was developed to calculate the autocorrelation of the target and the cross-correlation of target and background.

Program CORR performs the following task:

- Calculates autocorrelation or cross-correlation functions. The autocorrelation function may be calculated by the FFT method or by averaging the product of the overlap as the scene is moved over itself. The cross-correlation function is calculated by the FFT method.

The following is a description of how CORR operates in calculating the cross-correlation function:

- The first loop calculates the FFT of the background scene. The scene IRIG time is read and the corresponding scene is input from file 1 and unpacked. If the scene contains zeros, it is rejected and the next IRIG time is read. Zeros suggest that the thermovision black level was set too low, thus biasing the scene statistics. If the scene is accepted, the unpacked scene is stored in file 2. The scene mean and standard deviation are calculated during the unpack process.

- The size of the correlation function is determined. It is the smaller of the background or target scene sizes.
- If the background scene is larger, then its row and column end points are set equal to the target row and column size.
- If the background scene is smaller, no changes are made in this loop.
- The scene pixel magnitudes are transformed by subtracting the scene mean value from each pixel value.
- The FFT of the background is now calculated.
- The results are stored in file 3, terminating the background loop.
- The next loop calculates the FFT of the model target scene.
- If the background scene is smaller, the row and column start and stop points are adjusted such that the target will be centered in a scene the size of the background scene.
- The unpacked target scene is input from file 12, and the pixel magnitudes are transformed by subtracting the scene mean value from each pixel value.
- The FFT is calculated, and the results are multiplied by the background FFT in file 3.
- The whitening filter is applied at this point if the whitening option is taken.
- The cross-correlation is calculated by taking the inverse FFT.
- Edge effects are inducted into the correlation surface as the target body moves across the background scene boundaries. Because the FFT assumes the scene is periodic, the edge effect is correlating the target with the opposite edges of the background scene. The coefficients affected are in two bands, i.e., the length and width of the target that is centered in the correlation surface.

- The remaining coefficients are normalized by the target scene standard deviation.
- A histogram, probability density, and cumulative probability density function of the correlation surface are then generated.
- A histogram sort is used at this point to locate and print the 100 maximum correlation coefficients of the surface.
- A composite histogram, probability density, and cumulative probability density function of the surfaces generated by all backgrounds of the same type is generated and saved in file 10.

Program RDPL was written to plot the composite histograms produced by CORR.

Four classes of backgrounds and two targets were selected for the correlation studies. The background classes were FAWS GRASS, TREES, Asphalt Roads, and Buildup. The frames are listed in Table 3-9. The targets were FAWS M48 and APC.

The model target scenes and target mask scenes were created with program BTDBM. The target scenes are given in Table 3-10.

The first set of cross-correlation surfaces generated were the model target scenes with the four classes of backgrounds. The composite distribution function of the correlation surfaces are given in Table 3-11.

The cross-correlation surfaces of the target mask and four classes of background scenes were then generated. The composite distribution functions are given in Table 3-12.

The correlation surfaces of the target with the backgrounds were normalized by the correlation surface of the target mask and background. The composite histograms are given in Table 3-13.

The peak signal to clutter as seen by a sensor was calculated by the cross-correlation of a target mask scene and the scene scanned by the sensor. The target size of the target mask is the sensor field of view.

A 1-mrad-square sensor and a 2-mrad-square sensor were modeled in this manner. Both were modeled at an elevation of 3 kft. The results are given in Table 3-14.

A whitening filter was applied to the background and target scenes, and the correlation surface was generated. The background class of buildup was selected for this analysis. The whitening filter was approximated by the average power spectral density of the background scenes. Program PWRSPN was developed to calculate the average power spectral density. Program CORR was modified to apply the filter in the frequency domain. The scene mean was taken out of the filtered scene by setting the zero frequency component of the transformed scene to zero. The results are given in Table 3-15.

TABLE 3-1. ERIM DIGITAL TAPE FORMAT

- I. Tapes are IBM 7094 compatible, seven track, odd parity, and 800 BPI.
- II. Each file consists of a title record followed by data records containing each scan line.
 - A. Title record 170 36-bit words:
Word:
 - 1 - Number of IBM 7094 words per data record
 - 4 - Digital line number of next data record
 - 5 - Analog line number of next data record
 - 6 - Mode
 - = 0 - four samples/word positive integers (0 to 510)
 - = 1 - one sample/word floating point (0 to 1.0)
 - = 2 - one sample/word integer (0 to 510)
 - 7 - Number of channels
 - 8 - Number of samples per line
 - B. Data record - record length is in word one of title record. Record consists of an eight-word header followed by data from one scan line. Data from each channel are stored sequentially. Header words are:
 - 1 - Digital line number
 - 2 - Analog line number
- III. Each file is followed by one end-of-file record.
- IV. Last file is followed by three end-of-file records.

TABLE 3-2. AGA THERMOVISION DIGITAL TAPE FORMAT

- I. Tapes are CDC 6000 scope standards, odd parity, and 800 BPI
- II. Each record contains one thermovision scene or frame.
 - A. Record format is 15 60-bit word header followed by the data.
 - a. Header - 15 60-bit words where word one is CDC floating point value for IRIG TIME hours * 3,600,000 + minutes * 60,000 + SEC * 1,000
 - b. Next 2,000 60-bit words contain the 100 x 100 pixel scene, where each scan line is 100 pixels.
 - c. Pixel range is 0 to 1,024.
 - d. Pixel word length is 12 bits packed 5 pixels per 60-bit word and each scan line is 20 60-bit words.
 - e. There are 100 scan lines.
- III. Thermovision frames are stored sequentially by flight time.
- IV. End of file follows last frame.
- V. There are usually 200 to 300 frames per tape.

TABLE 3-3. USER TAPE LIBRARY

GROUP I. ERIM DATA TAPES

<u>SERIAL NUMBER</u>	
S05391	Jackson, 8 kft, Lakes Jackson, 8 kft, River Camp Lejeune, 3 kft, Buildings Camp Lejeune, 3 kft, Trees
S02583	Plymouth, 1 kft, Field Plymouth, 1 kft, Subdivision Plymouth, 1 kft, Island Plymouth, 1 kft, Expressway Plymouth, 1 kft, Cemetery Plymouth, 1 kft, Golf Course
S07779 and S07715	Guelph, Ontario, Canada
S08831	Guelph, Ontario, Canada
S05343 and S06620	Guelph, Ontario, Canada
S05460	Guelph, Ontario, Canada
S03389	Willow Run Airport
S03677	Willow Run Airport
S08020	Willow Run Airport
S05574	Willow Run Airport
S03452	Willow Run Airport

GROUP II. ARMY DATA RECORDED BY AGA THERMOVISION

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>ORIGINAL NO.</u>
<u>Section II-1. First Flights of Thermovision Over Redstone Arsenal</u>		
S06448	First Flight Over Redstone Arsenal April 1977	None
S00224	Second Flight Over Redstone Arsenal April 1977	WS200
S04679	14 April 1977 Flight	WS201

TABLE 3-3. USER TAPE LIBRARY (Sheet 2 of 2)

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>ORIGINAL NO.</u>
<u>Section II-2. Flights over Aberdeen Proving Grounds</u>		
S09379	Mission A2 time 1025-1120(3-5)	I000169
S09380	A1 time 1530-1615(3-5)	I000170
S09385	A3 time 1230-1330(3-5)	I000168
S09382	A4 time 1325-1410(3-5)	I000167
S08894	B3 time 1100-1200(3-5)	I000328
S09597	B2 time 1520-1600(3-5)	I000327
S09577	B1 time 1150-1235(3-5)	I000325
S02284	A1 (reformatted)	
<u>Section II-3. Flights over Ft. Hood</u>		
S10219	29 June 77 time 1045-1115(3-5)	I00737
S10225	27 June 77 time 1100- (3-5)	I00733
S10240	29 June 77 time 1045-1115(8-14)	I00736
S10239	27 June 77 time 0930-1030(8-14)	I00734
S10333	27 June 77 time 0930-1030(3-5)	I00735
S10231	28 June 77 (8-14)	I00732
S10326	30 June 77 time 1000-1100(8-14)	I00775
S10325	30 June 77 time 1100-1230(8-14)	I00774
S10328	30 June 77 time 1000-1100(3-5)	I00772
S10331	30 June 77 (8-14)	I00735
S10333	28 June 77 (3-5)	I00835
<u>Section II-4. FAWS Preflight</u>		
S07711	Flight over Building 5400 (3-5)	
S06549	Flight over Building 5400 (8-14)	
<u>Section II-5. FAWS Flights over Redstone Arsenal</u>		
S08529	8 August 77 (8-14) Tape 7	I00841
S00291	8 August 77 (3-5) Tape 7	I00843
S02733	8 August 77 (8-14) Tape 8	I00844
S09518	8 August 77 (3-5) Tape 8	I00845
S00772	15 August 77 (3-5) Tape 1	I01288
S02984	15 August 77 (8-14) Tape 1	I01287
S11029	15 August 77 (3-5) Tape 2	I01286
S03128	15 August 77 (8-14) Tape 2	I01285

TABLE 3-4. NEW AGA THERMOVISION DIGITAL
TAPE FORMAT

- I. Data words are 12 bits (packed 5 words per 60-bit CDC word).
- II. Each record consists of:
 - A. Nine-word header
 - B. Twenty-one line IRIG times, each time consisting of 3 words, total 63 words
 - C. Twenty-one scan lines, each consisting of 138 data points followed by the scan sequence number. Total 139 words per line
 - D. The two least significant bits of each scan line number constitute a code. A value of three denotes a good scan line.

TABLE 3-5. TIME BIT CODE

Time in 36 bits

BIT	CODE
1	40 min
2	20 min
3	10 min
4	8 min
5	4 min
6	2 min
7	20 hr
8	10 hr
9	9 hr
10	4 hr
11	2 hr
12	1 hr
13	2 sec
14	1 sec
15	0.8 sec
16	0.4 sec
17	0.2 sec
18	0.1 sec
19	1 min
20	40 sec
21	20 sec
22	10 sec
23	8 sec
24	4 sec
25	0.002 sec
26	0.001 sec
27	0.0008 sec
28	0.0004 sec
29	0.0002 sec
30	0.0001 sec
31	0.08 sec
32	0.04 sec
33	0.02 sec
34	0.01 sec
35	0.008 sec
36	0.004 sec

TABLE 3-6. CLASSIFICATION CODES

INDEX	CODE	CLASSIFICATION
1	R	DIRT ROAD
2	AR	ASPHALT ROAD
3	CCR	CONCRETE ROAD
4	BU	BUILDINGS
5	PL	ASPHALT PARKING LOTS
6	HS	UNIDENTIFIED HOT AREAS
7	G	GRASSY AREA
8	GS	GRASSY FIELD WITH STRAITS
9	DR	DIRT ROADS
10	TR	TREES
11	TRU	TREE LINE
12	B	BUSH
13	BL	BUSH LINE
14	SG	SUN GLINT
15	RR	RAILROAD
16	M	MONUMENT
17	W	WATER
18	STP	STEAM PIPE
19	SP	SAND PILES
20	DST	DUST
21	CR	CREEK
22	CF	COTTON FIELD
23	X	BAD FRAME
24	T1	TARGET 1
25	T2	TARGET 2
26	T3	TARGET 3
27	T4	TARGET 4
28	T5	TARGET 5
29	T6	TARGET 6
30	T7	TARGET 7
31	T8	TARGET 8
32	T9	TARGET 9
33	T10	TARGET 10
34	T11	TARGET 11
35	T12	TARGET 12
36	T13	TARGET 13
37	T14	TARGET 14
38	T15	TARGET 15
39	T16	TARGET 16
40	MPG	MILITARY PARKING LOT
41	D	BARE DIRT

TABLE 3-7. DATA BASE

RECORD	VARIABLES	DESCRIPTION
1	NTCLK	TOTAL NUMBER OF CLASSIFICATIONS IN DATA BASE
2	NTEST	NUMBER OF TESTS IN DATA BASE
	ICLK	COMPLETE DATA BASE CLASSIFICATION KEYS STORED IN A4 FORMAT
	ICLC	THIRTY-CHARACTER FULL CLASSIFICATION
NOTE: REMAINING RECORDS ARE INDIVIDUAL TEST RECORDS. THREE RECORD SET FOR EACH TEST. FOR DOCUMENTATION, THESE WILL BE RECORDS 3, 4 AND 5.		
3	TL	EIGHTY CHARACTER TITLE OF TEST. WORD 6 CONTAINS TAPE NUMBER.
	NR	NUMBER OF FRAMES IN TEST
	INDX	NUMBER OF INDIVIDUAL CLASSIFICATIONS ON TAPE
	NCLK	PACKED ARRAY WHOSE INDEX REFERENCES THE COMPLETE DATA BASE CLASSIFICATION TABLE
		VALUES OF ELEMENTS ARE:
		UPPER HALF: NUMBER OF FRAMES WITH THIS CLASSIFICATION
		LOWER HALF: NUMBER OF THESE FRAMES THAT ARE MIXTURES
		NUMBER OF DOCUMENTS (NTLLK)
	ICL	INDIVIDUAL FRAME CLASSIFICATION TABLE. FOUR TABLES ARE PACKED INTO THIS ARRAY. TABLE INDEX IS SAME AS FRAME INDEX (FRAMES ARE STORED ON TAPE IN SEQUENTIAL ORDER). THE FIRST NR ELEMENTS OF TABLE CONTAIN FIVE 12-BIT WORDS WHERE WORD ONE IS LOW ORDER BITS AND WORD FIVE IS HIGH ORDER BITS.

TABLE 3-7. DATA BASE (Sheet 2 of 3)

RECORD	VARIABLES	DESCRIPTION
		WORD 1: MESSAGE TABLE INDEX; IF ZERO, NO MESSAGES FOR THIS FRAME
		WORD 2: NUMBER OF CLASSIFICATIONS FOR THIS FRAME
		WORD 3: STARTING INDEX OR ADDRESS INTO THE INDIVIDUAL FRAME CLASSIFICATION TABLE
		WORD 4: COMPLETE TEST CLASSIFICATION TABLE (INDIVIDUAL FRAME CLASSIFICATION TABLE)
		{INDEX) IS TOTAL NUMBER OF ELEMENTS IN THIS TABLE; THE FIRST NR ELEMENTS ARE PACKED AND THE REMAINING ARE NOT.
		THE VALUE OF EACH ELEMENT IS THE INDEX OR ADDRESS FOR THE COMPLETE DATA BASE CLASSIFICATION TABLE.
		WORD 5: ALTITUDE AND WAVEBAND INDEX KEY.
	NMSG	MESSAGE TABLE LENGTH
	MSG	MESSAGE TABLE. EACH MESSAGE IS A 30 CHARACTER NOTE CONTAINING ADDITIONAL INFORMATION ON SPECIAL FRAMES. *WORD 31 CONTAINS THE FRAME INDEX FOR CROSS REFERENCE PURPOSES.
4		TABLE LENGTH, NUMBER FRAMES IN TEST. EACH ELEMENT CONTAINS FIVE 12-BIT WORDS: WORD 1 LOW ORDER; WORD FIVE HIGH ORDER 12 BITS. TABLE INDEX CORRESPONDS TO FRAME INDEX
		WORD 1: SCENE MEAN (INTEGER)
		WORD 2: FRAME IRIG FRACTION SECONDS TIMES 1,000 INTEGER

TABLE 3-7. DATA BASE (Sheet 3 of 3)

RECORD	VARIABLES	DESCRIPTION
		WORD 3: WHOLE NUMBER SECONDS OF IRIG TIME
		WORD 4: IRIG MINUTES
		WORD 5: IRIG HOURS
5		TABLE LENGTH, NUMBER OF FRAMES IN TEST. TABLE INDEX CORRESPONDS TO FRAME INDEX. EACH ELEMENT CONTAINS FIVE 12-BIT WORDS: WORD 1 IS LOW ORDER; WORD FIVE IS HIGH ORDER.
		WORD 1: NUMBER OF BOGUS PIXELS IN SCENE (INTEGER)
		WORD 2: NUMBER OF ZERO PIXELS IN SCENE (INTEGER)
		WORD 3: MAXIMUM PIXEL VALUE IN SCENE (INTEGER)
		WORD 4: MINIMUM PIXEL VALUE IN SCENE (INTEGER)
		WORD 5: SCENE STANDARD DEVIATION (TRUNCATED INTEGER)

TABLE 3-8. TASK MNEMONICS

PRINT ALL

PRINTS SHORT TEST HISTORY FOR ALL TESTS AND ALL FRAMES IN
DATA BASE

PRINT ALL TEST NUMBER

PRINTS SHORT TEST HISTORY AND ALL FRAMES IN THE SPECIFIED TEST
NUMBER

PRINT TEST ALL

PRINT TEST NUMBER

PRINTS SHORT TEST HISTORY FOR ALL TESTS OR THE SPECIFIED TEST
NUMBER

PRINT TEST ALL CLASSIFICATION

PRINT TEST NUMBER CLASSIFICATION

PRINTS THE FRAMES WITH THE SPECIFIED CLASSIFICATION. THE
CLASSIFICATIONS ARE INPUT BY ENTERING CLASSIFICATION KEYS
IN A FREE FIELD FORMAT.

KEY 1 PRINTS ONLY FRAMES WITH KEY 1 CLASSIFICATION

KEY 1/KEY 2 PRINTS ONLY FRAMES WITH MIXTURE OF KEY 1 AND KEY 2

KEY 1 ALL PRINTS ALL OCCURRENCES OF KEY 1

PRINT MESSAGES

PRINT MESSAGES TEST NUMBER

PRINTS ALL MESSAGES WITH FRAME IRIG TIME CONTAINED IN ALL
TEST OR THE SPECIFIED TEST NUMBER

PRINT CLASSIFICATION TABLE

PRINTS ALL CLASSIFICATIONS WITH CORRESPONDING KEYS THAT ARE
CONTAINED IN THE DATA BASE

TABLE 3-8. TASK MNEMONICS (Sheet 2 of 2)

BUILD TEST NUMBER

BUILDS A DATA FILE CONTAINING FRAME NUMBER AND IRIG TIME. THE FRAMES ARE SELECTED BY INPUTTING CLASSIFICATION KEYS IN THE SAME MANNER AS THE PRINT CLASSIFICATION MNEMONICS. THIS DATA FILE CAN BE USED TO ACCESS THE TAPE FILE AND RETRIEVE ONLY THE FRAMES SELECTED.

UPDATE TEST NUMBER TITLE

REPLACES THE SPECIFIED TEST NUMBER TITLE WITH THE INPUT TEST TITLE

UPDATE TEST NUMBER CLASSIFICATION

INPUTS A FRAME NUMBER AND CLASSIFICATION KEY OR KEYS. THIS REPLACES THE FRAME CLASSIFICATION ON FILE

UPDATE TEST NUMBER MESSAGE

INPUTS FRAME AND A MESSAGE THAT REPLACES THE ONE ON FILE

UPDATE TEST NUMBER ALTITUDE

INPUTS FRAME AND ALTITUDE THAT REPLACES ONE ON FILE

UPDATE TEST NUMBER WAVEBAND

INPUTS FRAME AND WAVEBAND THAT REPLACES THE ONE ON FILE.

TABLE 3-9. BACKGROUND FRAMES SELECTED FOR CORRELATION STUDIES

500774

DATA FILE FOR TEST 3 FAMS IS A05 / 1 3-5 WH									
FRAMES WERE SELECTED BY THE FOLLOWING CLASSIFICATIONS									
GROSS W. 4									
EPOCH 2000 AND HAS DATA REJECTION CRITERION FOR 4041 2 15									
REJECTION CRITERION (22.0000) 210 210									
4041 FRAME INDEX OF FRAMES TO BE DELETED FROM FILE 4 FORMAT(1015)									
INDEX FRAME 1 HAS BEEN DELETED									
INDEX FRAME 34 HAS BEEN DELETED									
4	10	42	57.509	0	100	194	58	94	17
7	15	42	58.000	0	100	195	58	95	17
10	10	43	57.777	0	100	192	24	97	26
224	11	15	19.209	0	100	320	85	213	24
224	11	15	17.579	0	100	320	160	218	18
REJECTION FRAME 235 17.980 400 0									
231	11	15	18.321	0	100	320	157	219	21
237	11	15	19.727	0	100	309	168	220	18
240	11	15	19.159	0	100	324	146	244	20
247	11	15	40.529	0	100	320	159	235	24
249	11	15	21.210	0	100	320	164	207	24
249	11	15	44.034	0	100	211	146	205	22
254	11	15	50.236	0	100	325	85	232	27
254	11	15	51.622	0	100	269	171	221	16
255	11	15	53.039	0	100	260	169	215	14
255	11	15	55.721	0	100	277	174	218	14
257	11	15	57.171	0	100	320	159	216	22
258	11	15	59.537	0	100	320	157	213	19

TABLE 3-9. BACKGROUND FRAMES SELECTED FOR CORRELATION STUDIES (Sheet 4 of 4)

S00778

DATA FILE FOR TEST 3 FAMS 15 AUG 77 3-5 WH									
FRAMES WERE SELECTED BY THE FOLLOWING CLASSIFICATIONS									
ASPHALT ROAD									
INPUT ZERO AND HAD DATA REJECTION CRITERION FORMAT 2 15									
REJECTION CRITERION (NZM-NHW) 210 210									
INPUT FRAME INDEX OF FRAMES TO BE DELETED FROM FILE 1 FORMAT(1015)									
INDEX FRAME 14 HAS BEEN DELETED									
12	10	45	56.833	0	100	293	148	216	28
13	10	45	58.224	0	100	288	127	210	27
14	10	45	59.588	0	100	240	127	199	30
15	10	46	1.003	0	100	280	127	200	30
16	10	46	5.145	0	100	289	127	194	38
REJECTED FRAME 17 N/A N/A 700 0									
18	10	46	34.320	0	100	320	127	227	39
20	10	46	39.855	0	0	289	127	204	26
21	10	46	41.307	0	100	320	127	190	39
23	10	46	45.437	0	100	320	165	250	26
24	10	46	48.204	0	0	512	165	238	31

TABLE 3-10. MODEL TARGET SCENES AND MODEL TARGET MASK SCENES

42	1.0	44	205	45	74	60	50	51	52	53	54	55	56	57	58	59	60	61	62
43	1.0	44	205	45	74	60	50	51	52	53	54	55	56	57	58	59	60	61	62
44	1.0	44	205	45	74	60	50	51	52	53	54	55	56	57	58	59	60	61	62
45	1.0	44	205	45	74	60	50	51	52	53	54	55	56	57	58	59	60	61	62
46	1.0	44	205	45	74	60	50	51	52	53	54	55	56	57	58	59	60	61	62
47	1.0	44	205	45	74	60	50	51	52	53	54	55	56	57	58	59	60	61	62
48	1.0	44	205	45	74	60	50	51	52	53	54	55	56	57	58	59	60	61	62
49	1.0	44	205	45	74	60	50	51	52	53	54	55	56	57	58	59	60	61	62
50	1.0	44	205	45	74	60	50	51	52	53	54	55	56	57	58	59	60	61	62
51	1.0	44	205	45	74	60	50	51	52	53	54	55	56	57	58	59	60	61	62
52	1.0	44	205	45	74	60	50	51	52	53	54	55	56	57	58	59	60	61	62
53	1.0	44	205	45	74	60	50	51	52	53	54	55	56	57	58	59	60	61	62
54	1.0	44	205	45	74	60	50	51	52	53	54	55	56	57	58	59	60	61	62
55	1.0	44	205	45	74	60	50	51	52	53	54	55	56	57	58	59	60	61	62
56	1.0	44	205	45	74	60	50	51	52	53	54	55	56	57	58	59	60	61	62
57	1.0	44	205	45	74	60	50	51	52	53	54	55	56	57	58	59	60	61	62
58	1.0	44	205	45	74	60	50	51	52	53	54	55	56	57	58	59	60	61	62
59	1.0	44	205	45	74	60	50	51	52	53	54	55	56	57	58	59	60	61	62
60	1.0	44	205	45	74	60	50	51	52	53	54	55	56	57	58	59	60	61	62
61	1.0	44	205	45	74	60	50	51	52	53	54	55	56	57	58	59	60	61	62
62	1.0	44	205	45	74	60	50	51	52	53	54	55	56	57	58	59	60	61	62

TABLE 3-10. MODEL TARGET SCENES AND MODEL TARGET MASK SCENES (Sheet 2 of 4)

42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96
97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117
118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138
139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159
160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201
202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222
223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243
244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264
265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285
286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306
307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327
328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348
349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369
370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390
391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411
412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432
433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453
454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474
475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495
496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516
517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537
538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558
559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579
580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600
601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621
622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642
643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663
664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684
685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705
706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726
727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747
748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768
769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789
790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810
811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831
832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852
853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873
874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894
895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915
916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936
937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957
958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978
979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999
1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020

TABLE 3-10. MODEL TARGET SCENES AND MODEL TARGET MASK SCENES (Sheet 4 of 4)

[illegible]

TABLE 3-11. COMPOSITE DISTRIBUTION FUNCTION OF CORRELATION SURFACE OF
TARGET AND BACKGROUND SCENES

COMPOSITE OF 17 FILES
CROSS CORRELATION
FAWS TARGET 1 11 47 21.9
FAWS 0 0 0 11 1-5 40 GRASS

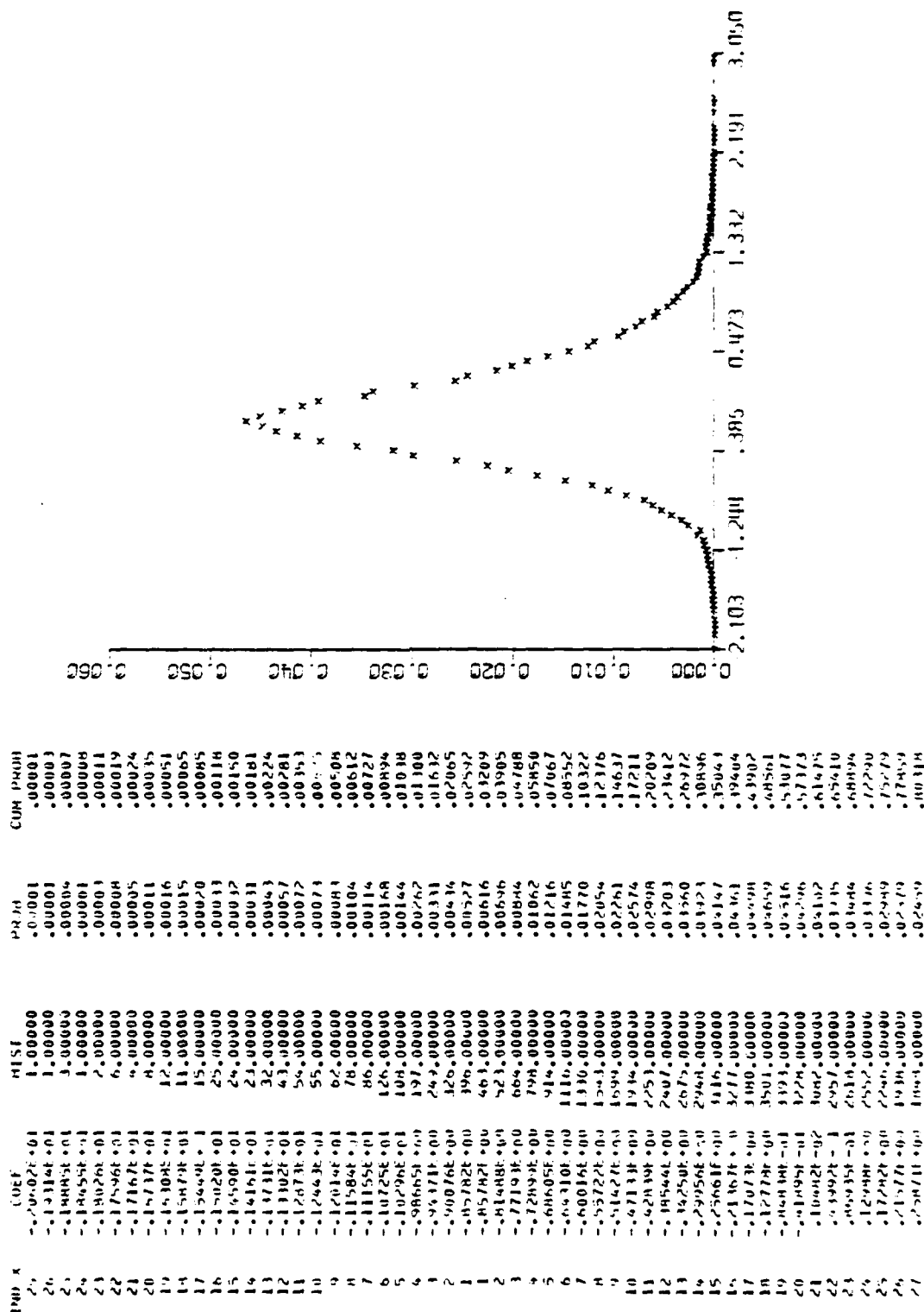


TABLE 3-11. COMPOSITE DISTRIBUTION FUNCTION OF CORRELATION SURFACE OF
TARGET AND BACKGROUND SCENES (Sheet 2 of 20)

INDEX	COEF	HIST	PROB	CUM PROB
24	.10165E+00	1631.00000	.02171	.82489
25	.14460E+00	1516.00000	.02018	.84506
30	.19754E+00	1403.00000	.01867	.86373
31	.24048E+00	1286.00000	.01658	.88032
32	.27363E+00	1093.00000	.01555	.89586
33	.31637E+00	747.00000	.01260	.90747
34	.35911E+00	305.00000	.01204	.91951
35	.40226E+00	723.00000	.00967	.92918
36	.44520E+00	676.00000	.00900	.93818
37	.48814E+00	583.00000	.00776	.94589
38	.53109E+00	540.00000	.00719	.95307
39	.57403E+00	452.00000	.00602	.95909
40	.61697E+00	428.00000	.00570	.96479
41	.65992E+00	351.00000	.00467	.96946
42	.70286E+00	309.00000	.00411	.97357
43	.74580E+00	278.00000	.00370	.97727
44	.78875E+00	231.00000	.00307	.98034
45	.83170E+00	200.00000	.00266	.98301
46	.87464E+00	155.00000	.00206	.98507
47	.91759E+00	148.00000	.00146	.98640
48	.96053E+00	117.00000	.00156	.98846
49	.10034E+00	112.00000	.00149	.98995
50	.10464E+00	115.00000	.00151	.99148
1	.10893E+00	86.00000	.00114	.99261
2	.11323E+00	63.00000	.00084	.99347
3	.11752E+00	70.00000	.00091	.99440
4	.12182E+00	63.00000	.00046	.99526
5	.12611E+00	49.00000	.00045	.99589
6	.13041E+00	39.00000	.00052	.99641
7	.13470E+00	36.00000	.00048	.99689
8	.13900E+00	27.00000	.00036	.99725
9	.14329E+00	39.00000	.00052	.99776
10	.14758E+00	17.00000	.00023	.99799
11	.15188E+00	28.00000	.00037	.99836
12	.15617E+00	14.00000	.00019	.99855
13	.16047E+00	19.00000	.00025	.99880
14	.16476E+00	14.00000	.00019	.99899
15	.16906E+00	12.00000	.00016	.99915
16	.17335E+00	12.00000	.00016	.99931
17	.17764E+00	11.00000	.00017	.99948
18	.18194E+00	7.00000	.00009	.99957
19	.18623E+00	11.00000	.00015	.99972
20	.19053E+00	4.00000	.00005	.99977
21	.19482E+00	4.00000	.00005	.99983
22	.19912E+00	2.00000	.00003	.99985
23	.20341E+00	1.00000	.00001	.99987
24	.20770E+00	1.00000	.00001	.99988
25	.21200E+00	1.00000	.00001	.99989
26	.21629E+00	1.00000	.00001	.99991
27	.22059E+00	1.00000	.00001	.99992
28	.22488E+00	1.00000	.00001	.99993
29	.22918E+00	1.00000	.00001	.99994
30	.23347E+00	1.00000	.00001	.99995
31	.23777E+00	1.00000	.00001	.99996
32	.24206E+00	1.00000	.00001	.99997
33	.24636E+00	1.00000	.00001	.99998
34	.25065E+00	1.00000	.00001	.99999
35	.25495E+00	1.00000	.00001	.99999
36	.25924E+00	1.00000	.00001	.99999
37	.26354E+00	1.00000	.00001	.99999
38	.26783E+00	1.00000	.00001	.99999
39	.27213E+00	1.00000	.00001	.99999
40	.27642E+00	1.00000	.00001	.99999
41	.28072E+00	1.00000	.00001	.99999
42	.28501E+00	1.00000	.00001	.99999
43	.28931E+00	1.00000	.00001	.99999
44	.29360E+00	1.00000	.00001	.99999
45	.29790E+00	1.00000	.00001	.99999
46	.30219E+00	1.00000	.00001	.99999
47	.30649E+00	1.00000	.00001	.99999
48	.31078E+00	1.00000	.00001	.99999
49	.31508E+00	1.00000	.00001	.99999
50	.31937E+00	1.00000	.00001	.99999
51	.32367E+00	1.00000	.00001	.99999
52	.32796E+00	1.00000	.00001	.99999
53	.33226E+00	1.00000	.00001	.99999
54	.33655E+00	1.00000	.00001	.99999
55	.34085E+00	1.00000	.00001	.99999
56	.34514E+00	1.00000	.00001	.99999
57	.34944E+00	1.00000	.00001	.99999
58	.35373E+00	1.00000	.00001	.99999
59	.35803E+00	1.00000	.00001	.99999
60	.36232E+00	1.00000	.00001	.99999
61	.36662E+00	1.00000	.00001	.99999
62	.37091E+00	1.00000	.00001	.99999
63	.37521E+00	1.00000	.00001	.99999
64	.37950E+00	1.00000	.00001	.99999
65	.38380E+00	1.00000	.00001	.99999
66	.38809E+00	1.00000	.00001	.99999
67	.39239E+00	1.00000	.00001	.99999
68	.39668E+00	1.00000	.00001	.99999
69	.40098E+00	1.00000	.00001	.99999
70	.40527E+00	1.00000	.00001	.99999
71	.40957E+00	1.00000	.00001	.99999
72	.41386E+00	1.00000	.00001	.99999
73	.41816E+00	1.00000	.00001	.99999
74	.42245E+00	1.00000	.00001	.99999
75	.42675E+00	1.00000	.00001	.99999
76	.43104E+00	1.00000	.00001	.99999
77	.43534E+00	1.00000	.00001	.99999
78	.43963E+00	1.00000	.00001	.99999
79	.44393E+00	1.00000	.00001	.99999
80	.44822E+00	1.00000	.00001	.99999
81	.45252E+00	1.00000	.00001	.99999
82	.45681E+00	1.00000	.00001	.99999
83	.46111E+00	1.00000	.00001	.99999
84	.46540E+00	1.00000	.00001	.99999
85	.46970E+00	1.00000	.00001	.99999
86	.47399E+00	1.00000	.00001	.99999
87	.47829E+00	1.00000	.00001	.99999
88	.48258E+00	1.00000	.00001	.99999
89	.48688E+00	1.00000	.00001	.99999
90	.49117E+00	1.00000	.00001	.99999
91	.49547E+00	1.00000	.00001	.99999
92	.49976E+00	1.00000	.00001	.99999
93	.50406E+00	1.00000	.00001	.99999
94	.50835E+00	1.00000	.00001	.99999
95	.51265E+00	1.00000	.00001	.99999
96	.51694E+00	1.00000	.00001	.99999
97	.52124E+00	1.00000	.00001	.99999
98	.52553E+00	1.00000	.00001	.99999
99	.52983E+00	1.00000	.00001	.99999
100	.53412E+00	1.00000	.00001	.99999
101	.53842E+00	1.00000	.00001	.99999
102	.54271E+00	1.00000	.00001	.99999
103	.54701E+00	1.00000	.00001	.99999
104	.55130E+00	1.00000	.00001	.99999
105	.55560E+00	1.00000	.00001	.99999
106	.55989E+00	1.00000	.00001	.99999
107	.56419E+00	1.00000	.00001	.99999
108	.56848E+00	1.00000	.00001	.99999
109	.57278E+00	1.00000	.00001	.99999
110	.57707E+00	1.00000	.00001	.99999
111	.58137E+00	1.00000	.00001	.99999
112	.58566E+00	1.00000	.00001	.99999
113	.58996E+00	1.00000	.00001	.99999
114	.59425E+00	1.00000	.00001	.99999
115	.59855E+00	1.00000	.00001	.99999
116	.60284E+00	1.00000	.00001	.99999
117	.60714E+00	1.00000	.00001	.99999
118	.61143E+00	1.00000	.00001	.99999
119	.61573E+00	1.00000	.00001	.99999
120	.62002E+00	1.00000	.00001	.99999
121	.62432E+00	1.00000	.00001	.99999
122	.62861E+00	1.00000	.00001	.99999
123	.63291E+00	1.00000	.00001	.99999
124	.63720E+00	1.00000	.00001	.99999
125	.64150E+00	1.00000	.00001	.99999
126	.64579E+00	1.00000	.00001	.99999
127	.65009E+00	1.00000	.00001	.99999
128	.65438E+00	1.00000	.00001	.99999
129	.65868E+00	1.00000	.00001	.99999
130	.66297E+00	1.00000	.00001	.99999
131	.66727E+00	1.00000	.00001	.99999
132	.67156E+00	1.00000	.00001	.99999
133	.67586E+00	1.00000	.00001	.99999
134	.68015E+00	1.00000	.00001	.99999
135	.68445E+00	1.00000	.00001	.99999
136	.68874E+00	1.00000	.00001	.99999
137	.69304E+00	1.00000	.00001	.99999
138	.69733E+00	1.00000	.00001	.99999
139	.70163E+00	1.00000	.00001	.99999
140	.70592E+00	1.00000	.00001	.99999
141	.71022E+00	1.00000	.00001	.99999
142	.71451E+00	1.00000	.00001	.99999
143	.71881E+00	1.00000	.00001	.99999
144	.72310E+00	1.00000	.00001	.99999
145	.72740E+00	1.00000	.00001	.99999
146	.73169E+00	1.00000	.00001	.99999
147	.73599E+00	1.00000	.00001	.99999
148	.74028E+00	1.00000	.00001	.99999
149	.74458E+00	1.00000	.00001	.99999
150	.74887E+00	1.00000	.00001	.99999
151	.75317E+00	1.00000	.00001	.99999
152	.75746E+00	1.00000	.00001	.99999
153	.76176E+00	1.00000	.00001	.99999
154	.76605E+00	1.00000	.00001	.99999
155	.77035E+00	1.00000	.00001	.99999
156	.77464E+00	1.00000	.00001	.99999
157	.77894E+00	1.00000	.00001	.99999
158	.78323E+00	1.00000	.00001	.99999
159	.78753E+00	1.00000	.00001	.99999
160	.79182E+00	1.00000	.00001	.99999
161	.79612E+00	1.00000	.00001	.99999
162	.80041E+00	1.00000	.00001	.99999
163	.80471E+00	1.00000	.00001	.99999
164	.80900E+00	1.00000	.00001	.99999
165	.81330E+00	1.00000	.00001	.99999
166	.81759E+00	1.00000	.00001	.99999
167	.82189E+00	1.00000	.00001	.99999
168	.82618E+00	1.00000	.00001	.99999
169	.83048E+00	1.00000	.00001	.99999
170	.83477E+00	1.00000	.00001	.99999
171	.83907E+00	1.00000	.00001	.99999
172	.84336E+00	1.00000	.00001	.99999
173	.84766E+00	1.00000	.00001	.99999
174	.85195E+00	1.00000	.00001	.99999
175	.85625E+00	1.00000	.00001	.99999
176	.86054E+00	1.00000	.00001	.99999
177	.86484E+00	1.00000	.00001	.99999
178	.86913E+00	1.00000	.00001	.99999
179	.87343E+00	1.00000	.00001	.99999
180	.87772E+00	1.00000	.00001	.99999
181	.88202E+00	1.00000	.00001	.99999
182	.88631E+00	1.00000	.00001	.99999
183	.89061E+00	1.00000	.00001	.99999
184	.89490E+00	1.00000	.00001	.99999
185	.89920E+00	1.00000	.00001	.99999
186	.90349E+00	1.00000		

TABLE 3-11. COMPOSITE DISTRIBUTION FUNCTION OF CORRELATION SURFACE OF
TARGET AND BACKGROUND SCENES (Sheet 3 of 20)

COMPOSITE OF 36 FILES
CROSS CORRELATION
FAMS TABLE 1 11 47 21.7
FAMS 4 4.36 77 3-5 MS TREES

INDEX	COEF	TEST	PH-1	CUM PROB
14	-0.11369E+01	1.00000	.00001	.00001
17	-0.11137E+01	1.00000	.00001	.00001
35	-0.12428E+01	1.00000	.00001	.00002
35	-0.12712E+01	1.00000	.00001	.00005
35	-0.12499E+01	2.00000	.00001	.00007
33	-0.12286E+01	4.00000	.00001	.00009
32	-0.12076E+01	2.00000	.00001	.00011
31	-0.11461E+01	7.00000	.00005	.00015
30	-0.11563E+01	7.00000	.00005	.00020
24	-0.11436E+01	9.00000	.00006	.00026
24	-0.11226E+01	10.00000	.00007	.00031
27	-0.11011E+01	14.00000	.00009	.00042
26	-0.10798E+01	15.00000	.00010	.00052
25	-0.10586E+01	14.00000	.00012	.00064
24	-0.10373E+01	21.00000	.00014	.00078
23	-0.10161E+01	14.00000	.00017	.00090
22	-0.09949E+01	14.00000	.00014	.00102
21	-0.09735E+01	21.00000	.00017	.00116
20	-0.09522E+01	26.00000	.00023	.00131
19	-0.09310E+01	35.00000	.00035	.00156
14	-0.09097E+01	50.00000	.00045	.00192
17	-0.08885E+01	50.00000	.00043	.00225
16	-0.08672E+01	72.00000	.00048	.00271
15	-0.08460E+01	71.00000	.00047	.00320
14	-0.08247E+01	72.00000	.00049	.00369
13	-0.08034E+01	114.00000	.00057	.00426
12	-0.07822E+01	114.00000	.00076	.00502
11	-0.07609E+01	133.00000	.00084	.00590
10	-0.07397E+01	152.00000	.00101	.00691
9	-0.07184E+01	204.00000	.00116	.00827
8	-0.06971E+01	187.00000	.00124	.00951
7	-0.06759E+01	245.00000	.00143	.01114
6	-0.06546E+01	263.00000	.00174	.01289
5	-0.06334E+01	283.00000	.00188	.01477
4	-0.06121E+01	321.00000	.00213	.01711
3	-0.05909E+01	387.00000	.00257	.01968
2	-0.05696E+01	468.00000	.00311	.02279
1	-0.05483E+01	539.00000	.00365	.02625
1	-0.05271E+01	597.00000	.00397	.03022
2	-0.05058E+01	666.00000	.00461	.03465
1	-0.04846E+01	778.00000	.00517	.03982
3	-0.04633E+01	948.00000	.00581	.04511
5	-0.04421E+01	1148.00000	.00658	.05261
6	-0.04209E+01	1348.00000	.00764	.06024
7	-0.03997E+01	1548.00000	.00873	.06897
4	-0.03784E+01	1674.00000	.00980	.07977
2	-0.03572E+01	1792.00000	.01117	.09014
10	-0.03360E+01	1956.00000	.01301	.10314
12	-0.03148E+01	2144.00000	.01449	.11734
12	-0.02936E+01	2400.00000	.01576	.13310
13	-0.02724E+01	2648.00000	.01746	.15216
14	-0.02512E+01	3043.00000	.01946	.17241
15	-0.02300E+01	3443.00000	.02170	.19451
16	-0.02088E+01	3711.00000	.02404	.21919

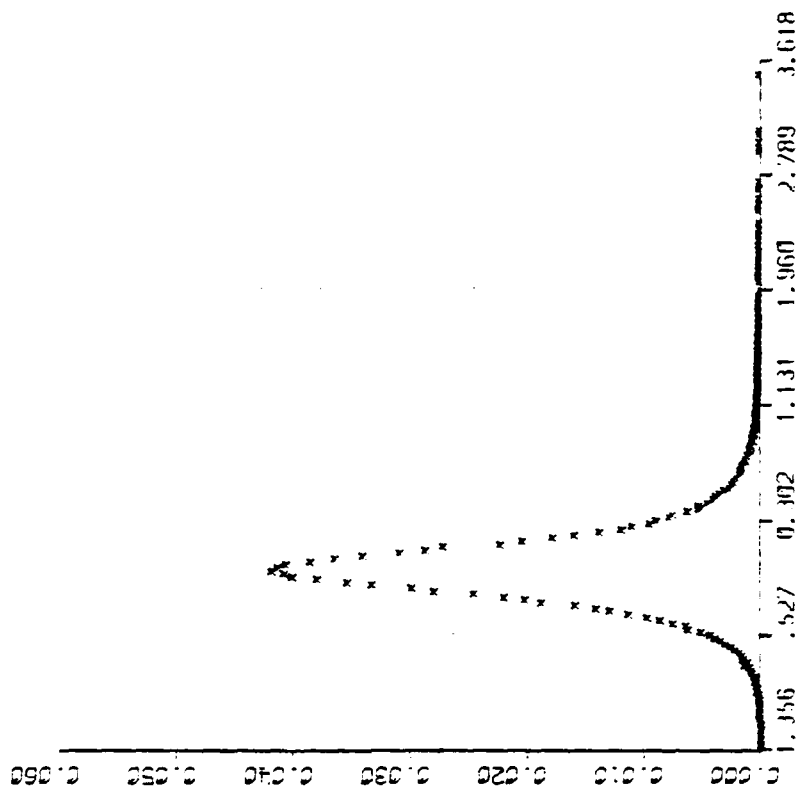


TABLE 3-11. COMPOSITE DISTRIBUTION FUNCTION OF CORRELATION SURFACE OF
TARGET AND BACKGROUND SCENES (Sheet 4 of 20)

INDEX	COEF	HIST	PROB	CUM PROB
17	-0.2025E+00	422E+00000	.02804	.24721
17	-1.4639E+00	450E+00000	.02395	.27122
17	-1.6533E+00	501E+00000	.01116	.31059
20	-1.4647E+00	533E+00000	.01751	.34510
21	-1.1232E+00	572E+00000	.03807	.38417
22	-1.0136E+00	604E+00000	.04019	.42436
23	-1.0000E+00	616E+00000	.04084	.46524
24	-1.5344E+00	631E+00000	.04701	.50725
25	-1.1413E+00	624E+00000	.04153	.54818
26	-1.6425E+00	612E+00000	.04077	.58955
27	-4.3333E+00	541E+00000	.04966	.62822
28	-1.5592E+00	550E+00000	.04660	.66481
29	-4.5450E+00	514E+00000	.04321	.69902
30	-4.9104E+00	465E+00000	.03096	.72998
31	-4.9166E+00	432E+00000	.02815	.75913
32	-1.1027E+00	410E+00000	.02728	.78602
33	-1.1138E+00	317E+00000	.02243	.80845
34	-1.5114E+00	308E+00000	.02053	.82897
35	-1.7440E+00	269E+00000	.01749	.84687
36	-1.9566E+00	242E+00000	.01615	.86302
37	-2.1632E+00	208E+00000	.01349	.87690
38	-2.3417E+00	181E+00000	.01204	.88894
39	-2.5433E+00	166E+00000	.01106	.90000
40	-2.4038E+00	144E+00000	.00963	.90963
41	-3.0135E+00	115E+00000	.00804	.91867
42	-3.2121E+00	110E+00000	.00740	.92658
43	-1.6447E+00	116E+00000	.00762	.93420
44	-1.5572E+00	94E+00000	.00627	.94047
45	-1.4638E+00	79E+00000	.00531	.94578
46	-4.0424E+00	81E+00000	.00545	.95123
47	-4.2920E+00	69E+00000	.00462	.95584
48	-4.5076E+00	61E+00000	.00410	.95995
49	-4.7201E+00	59E+00000	.00343	.96388
50	-4.4127E+00	54E+00000	.00363	.96751
1	-5.1453E+00	47E+00000	.00316	.97067
2	-5.3579E+00	40E+00000	.00266	.97333
3	-5.5705E+00	37E+00000	.00247	.97580
4	-5.7831E+00	34E+00000	.00231	.97810
5	-5.9956E+00	29E+00000	.00177	.98007
6	-6.2082E+00	23E+00000	.00159	.98166
7	-6.4208E+00	24E+00000	.00164	.98331
8	-6.5334E+00	21E+00000	.00145	.98476
9	-6.7460E+00	22E+00000	.00149	.98624
10	-6.9586E+00	15E+00000	.00106	.98730
11	-7.1711E+00	17E+00000	.00115	.98845
12	-7.3837E+00	14E+00000	.00095	.98940
13	-7.5963E+00	10E+00000	.00072	.99012
14	-7.8089E+00	11E+00000	.00078	.99091
15	-8.0215E+00	10E+00000	.00072	.99163
16	-8.2341E+00	10E+00000	.00071	.99234
17	-8.4466E+00	7E+00000	.00047	.99281
18	-8.6592E+00	8E+00000	.00055	.99336
19	-8.8718E+00	8E+00000	.00053	.99389
20	-9.0844E+00	6E+00000	.00043	.99433
21	-9.2970E+00	6E+00000	.00040	.99471
22	-9.5096E+00	7E+00000	.00045	.99501
23	-9.7221E+00	4E+00000	.00033	.99540
24	-9.9347E+00	4E+00000	.00029	.99568
25	-1.0147E+00	4E+00000	.00030	.99598

TABLE 3-11. COMPOSITE DISTRIBUTION FUNCTION OF CORRELATION SURFACE OF
TARGET AND BACKGROUND SCENES (Sheet 5 of 20)

INDEX	LOG F	HIST	P-234	CUM. PROB
25	.1040E+01	45.00000	.00030	.99624
27	.1067E+01	37.00000	.00021	.99645
29	.1094E+01	29.00000	.00019	.99668
30	.1109E+01	24.00000	.00022	.99690
31	.1124E+01	24.00000	.00016	.99706
32	.1139E+01	21.00000	.00013	.99725
33	.1154E+01	21.00000	.00014	.99739
34	.1169E+01	25.00000	.00017	.99756
35	.1184E+01	19.00000	.00011	.99769
36	.1199E+01	21.00000	.00014	.99783
37	.1214E+01	21.00000	.00014	.99796
38	.1229E+01	19.00000	.00011	.99809
39	.1244E+01	17.00000	.00011	.99820
40	.1259E+01	11.00000	.00007	.99829
41	.1274E+01	14.00000	.00009	.99837
42	.1289E+01	16.00000	.00011	.99848
43	.1304E+01	8.00000	.00005	.99853
44	.1319E+01	14.00000	.00009	.99862
45	.1334E+01	6.00000	.00004	.99866
46	.1349E+01	11.00000	.00004	.99875
47	.1364E+01	10.00000	.00007	.99882
48	.1379E+01	8.00000	.00005	.99887
49	.1394E+01	5.00000	.00003	.99890
50	.1409E+01	4.00000	.00005	.99896
51	.1424E+01	5.00000	.00003	.99899
52	.1439E+01	5.00000	.00003	.99902
53	.1454E+01	12.00000	.00004	.99910
54	.1469E+01	4.00000	.00001	.99913
55	.1484E+01	7.00000	.00005	.99918
56	.1499E+01	5.00000	.00003	.99921
57	.1514E+01	6.00000	.00004	.99925
58	.1529E+01	8.00000	.00005	.99930
59	.1544E+01	6.00000	.00004	.99934
60	.1559E+01	6.00000	.00004	.99938
61	.1574E+01	5.00000	.00003	.99941
62	.1589E+01	3.00000	.00002	.99943
63	.1604E+01	4.00000	.00002	.99945
64	.1619E+01	5.00000	.00001	.99949
65	.1634E+01	5.00000	.00003	.99952
66	.1649E+01	3.00000	.00002	.99954
67	.1664E+01	3.00000	.00002	.99956
68	.1679E+01	1.00000	.00001	.99957
69	.1694E+01	4.00000	.00001	.99959
70	.1709E+01	5.00000	.00003	.99961
71	.1724E+01	4.00000	.00001	.99965
72	.1739E+01	1.00000	.00001	.99966
73	.1754E+01	1.00000	.00001	.99967
74	.1769E+01	1.00000	.00002	.99969
75	.1784E+01	1.00000	.00002	.99971
76	.1799E+01	1.00000	.00002	.99973
77	.1814E+01	2.00000	.00001	.99977
78	.1829E+01	3.00000	.00002	.99979
79	.1844E+01	5.00000	.00001	.99981
80	.1859E+01	2.00000	.00001	.99983
81	.1874E+01	1.00000	.00001	.99985
82	.1889E+01	2.00000	.00001	.99986
83	.1904E+01	2.00000	.00001	.99987
84	.1919E+01	2.00000	.00001	.99988
85	.1934E+01	2.00000	.00001	.99989
86	.1949E+01	2.00000	.00001	.99990
87	.1964E+01	2.00000	.00001	.99991

TABLE 3-11. COMPOSITE DISTRIBUTION FUNCTION OF CORRELATION SURFACE OF
TARGET AND BACKGROUND SCENES (Sheet 6 of 20)

INDEX	URF	1151	2404	CUM PROB
87	.24453E+01	1.00000	.00001	.99999
90	.24465E+01	1.00000	.00001	.99999
91	.24478E+01	1.00000	.00001	.99999
93	.24490E+01	1.00000	.00001	.99999
95	.24512E+01	1.00000	.00001	.99999
96	.24534E+01	2.00000	.00001	.99999
97	.24555E+01	1.00000	.00001	.99999
99	.24577E+01	1.00000	.00001	.99999
102	.24616E+01	1.00000	.00001	.99999
103	.24629E+01	1.00000	.00001	.99999
105	.24725E+01	2.00000	.00001	.99999
115	.24908E+01	1.00000	.00001	.99999
116	.24928E+01	1.00000	.00001	.99999
118	.25017E+01	1.00000	.00001	.99999
121	.25055E+01	1.00000	.00001	.99999
122	.25068E+01	1.00000	.00001	.99999
124	.25077E+01	1.00000	.00001	1.00000
COMPOSITE MEAN AND STANDARD DEVIATION -.41068178E-01 .27531117E+00				

TABLE 3-11. COMPOSITE DISTRIBUTION FUNCTION OF CORRELATION SURFACE OF
TARGET AND BACKGROUND SCENES (Sheet 7 of 20)

COMPOSITE OF 10 FILES
CROSS CORRELATION
FAWS TARGET 1 11 47 23.9
FAWS 11 AUG 77 1-5 MU ASPHALT ROADS

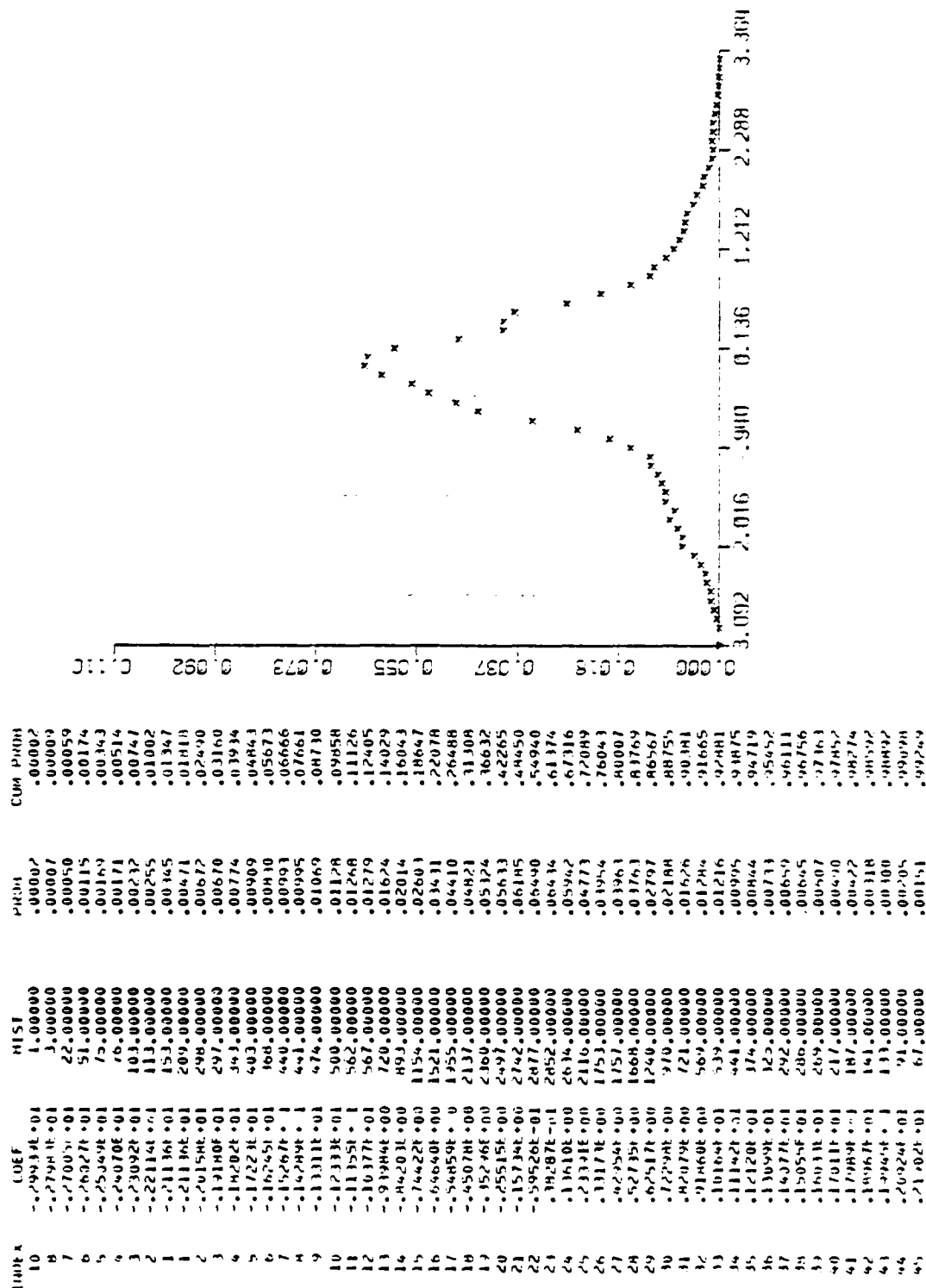


TABLE 3-11. COMPOSITE DISTRIBUTION FUNCTION OF CORRELATION SURFACE OF
TARGET AND BACKGROUND SCENES (Sheet 8 of 20)

INDEX	CORF	WIST	P-0001	CLIM PHOM
46	.22440E+01	55.00000	.00124	.99373
47	.21858E+01	60.00000	.00149	.99522
48	.24416E+01	54.00000	.00122	.97644
49	.25814E+01	50.00000	.00126	.97770
50	.26722E+01	47.00000	.00043	.99454
1	.27771E+01	29.00000	.00065	.99919
2	.28749E+01	17.00000	.00034	.99957
3	.29727E+01	11.00000	.00025	.99982
4	.30705E+01	5.00000	.00011	.99993
5	.31683E+01	2.00000	.00005	.99998
6	.32661E+01	1.00000	.00002	1.00000
COMPOSITE MEAN AND STANDARD DEVIATION				.83142231E+00
				-.10568086E+00

TABLE 3-11. COMPOSITE DISTRIBUTION FUNCTION OF CORRELATION SURFACE OF
TARGET AND BACKGROUND SCENES (Sheet 9 of 20)

COMPOSITE OF 5 FILES
CROSS CORRELATION
PAIRS TARGET 1 11 17 21 24
PAIRS 4 10 17 15 18 21 24 25

INDEX	COEFF	INST	PROB	CUM PROB
17	-0.6705E+01	1.00000	.00005	.00005
16	-0.5758E+01	4.00000	.00014	.00029
15	-0.4612E+01	2.00000	.00009	.00038
14	-0.4465E+01	1.00000	.00005	.00043
13	-0.4231E+01	4.00000	.00018	.00061
12	-0.4117E+01	1.00000	.00014	.00075
11	-0.4020E+01	5.00000	.00023	.00098
10	-0.3887E+01	8.00000	.00036	.00134
9	-0.3723E+01	14.00000	.00064	.00198
8	-0.3558E+01	9.00000	.00041	.00239
7	-0.3449E+01	12.00000	.00054	.00293
6	-0.3394E+01	13.00000	.00059	.00352
5	-0.3314E+01	21.00000	.00095	.00447
4	-0.3200E+01	11.00000	.00141	.00588
3	-0.3054E+01	26.00000	.00114	.00702
2	-0.2970E+01	34.00000	.00154	.00856
1	-0.2856E+01	45.00000	.00204	.01060
1	-0.2856E+01	54.00000	.00263	.01323
2	-0.2741E+01	85.00000	.00386	.01709
3	-0.2626E+01	94.00000	.00445	.02154
4	-0.2512E+01	111.00000	.00595	.02749
5	-0.2347E+01	168.00000	.00762	.03511
6	-0.2262E+01	163.00000	.00740	.04251
7	-0.2168E+01	169.00000	.00726	.04977
8	-0.2053E+01	162.00000	.00735	.05712
9	-0.1918E+01	159.00000	.00681	.06393
10	-0.1824E+01	169.00000	.00767	.07160
11	-0.1734E+01	182.00000	.00826	.07986
12	-0.1595E+01	192.00000	.00871	.08857
13	-0.1480E+01	205.00000	.00930	.09787
14	-0.1365E+01	272.00000	.01234	.11021
15	-0.1251E+01	173.00000	.01691	.12712
16	-0.1136E+01	555.00000	.02519	.15231
17	-0.1071E+01	712.00000	.03231	.18462
18	-0.9071E+00	416.00000	.03704	.22166
19	-0.7924E+00	914.00000	.04144	.26310
20	-0.6778E+00	1060.00000	.04411	.30721
21	-0.5631E+00	1762.00000	.04814	.35535
22	-0.4485E+00	1274.00000	.05782	.41317
23	-0.3338E+00	1044.00000	.06434	.47751
24	-0.2123E+00	687.00000	.06895	.54646
25	-0.1945E+00	637.00000	.07891	.62537
26	-0.1005E+00	511.00000	.08410	.70947
27	-0.2071E+00	515.00000	.02317	.73264
28	-0.1368E+00	501.00000	.02274	.75538
29	-0.1003E+00	632.00000	.02864	.78402
30	-0.0666E+00	809.00000	.03654	.82056
31	-0.0130E+00	474.00000	.03405	.85461
32	-0.1793E+00	471.00000	.03451	.88912
33	-0.1250E+00	687.00000	.03414	.92326
34	-0.2220E+00	540.00000	.03451	.95777
35	-0.0613E+00	661.00000	.03451	.99228
36	-0.1156E+00	662.00000	.03451	1.02679
37	-0.1712E+00	780.00000	.03451	1.06130

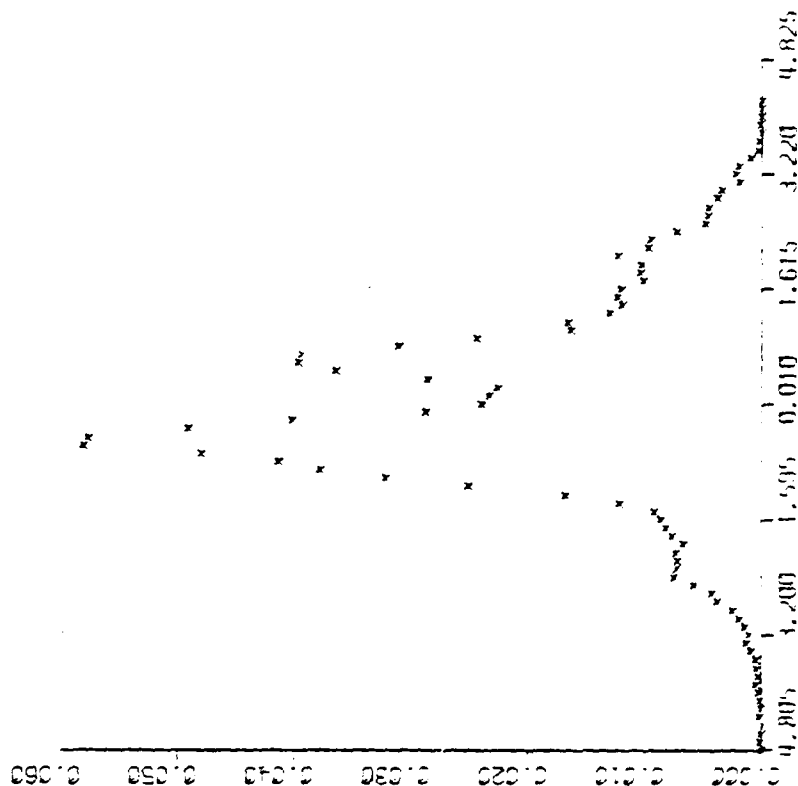


TABLE 3-11. COMPOSITE DISTRIBUTION FUNCTION OF CORRELATION SURFACE OF
TARGET AND BACKGROUND SCENES (Sheet 10 of 20)

INDEX	COEF	HIST	P-QM	CUM PROB
14	.14550E+01	264.00000	.01198	.87520
15	.15005E+01	275.00000	.01263	.88783
16	.15518E+01	286.00000	.01307	.89971
17	.17270E+01	225.00000	.01021	.90992
18	.14444E+01	231.00000	.01048	.92040
19	.17597E+01	210.00000	.01044	.93104
20	.20737E+01	213.00000	.01233	.94323
21	.21884E+01	215.00000	.00976	.95298
22	.23010E+01	211.00000	.00858	.96256
23	.24177E+01	164.00000	.00744	.97000
24	.25323E+01	109.00000	.00695	.97495
25	.26470E+01	103.00000	.00667	.97962
26	.27616E+01	101.00000	.00658	.98421
27	.28762E+01	80.00000	.00310	.98831
28	.29909E+01	70.00000	.00354	.99165
29	.31055E+01	41.00000	.00195	.99360
30	.32202E+01	51.00000	.00231	.99592
31	.33348E+01	43.00000	.00195	.99787
32	.34495E+01	21.00000	.00095	.99982
33	.35641E+01	8.00000	.00036	.99918
34	.36788E+01	7.00000	.00032	.99950
35	.37934E+01	2.00000	.00009	.99959
36	.39081E+01	4.00000	.00018	.99977
37	.40227E+01	3.00000	.00014	.99991
38	.41374E+01	1.00000	.00005	.99995
39	.42520E+01	1.00000	.00005	1.00000
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TABLE 3-11. COMPOSITE DISTRIBUTION FUNCTION OF CORRELATION SURFACE OF
TARGET AND BACKGROUND SCENES (Sheet 11 of 20)

COMPOSITE OF 17 FILLS
CROSS CORRELATION
FAWS TARGET / 1P 0 14.068
FAWS H AING / 1 1-5 M0 GRASS

INDEX	COEF	REST	PROB	CUM PROB
43	-0.7068H +01	1.00000	.00001	.00001
41	-0.68105E +01	1.00000	.00001	.00003
37	-0.65279E +01	1.00000	.00001	.00004
35	-0.61216E +01	1.00000	.00001	.00005
34	-0.60035E +01	1.00000	.00001	.00007
29	-0.54128E +01	1.00000	.00001	.00008
24	-0.52946E +01	1.00000	.00001	.00009
21	-0.51765E +01	2.00000	.00003	.00012
25	-0.49402E +01	1.00000	.00001	.00013
26	-0.48220E +01	4.00000	.00005	.00019
23	-0.47639E +01	3E.00000	.00043	.00061
22	-0.45458E +01	6H.00000	.00090	.00152
21	-0.44676E +01	89.00000	.00118	.00270
20	-0.43495E +01	7E.00000	.00096	.00366
19	-0.42313E +01	85.00000	.00113	.00479
14	-0.4132E +01	9E.00000	.00122	.00602
17	-0.3950E +01	7H.00000	.00106	.00705
16	-0.38768E +01	71.00000	.00094	.00800
15	-0.37587E +01	77.00000	.00102	.00902
14	-0.36406E +01	79.00000	.00105	.01007
13	-0.3525E +01	8E.00000	.00109	.01117
12	-0.34043E +01	10E.00000	.00140	.01256
11	-0.32862E +01	10E.00000	.00141	.01397
10	-0.31680E +01	11E.00000	.00158	.01556
9	-0.30499E +01	15E.00000	.00206	.01762
8	-0.29317E +01	17E.00000	.00232	.01994
7	-0.28146E +01	23E.00000	.00315	.02309
6	-0.26954E +01	41E.00000	.00415	.02724
5	-0.25773E +01	41E.00000	.00554	.03278
4	-0.24591E +01	55E.00000	.00737	.04015
3	-0.23410E +01	58E.00000	.00775	.04790
2	-0.22229E +01	63E.00000	.00946	.05636
1	-0.21047E +01	74E.00000	.00940	.06626
2	-0.19866E +01	82E.00000	.01187	.07813
3	-0.18684E +01	1E0E.00000	.01605	.09418
4	-0.17503E +01	146E.00000	.01790	.11208
5	-0.16321E +01	158E.00000	.02111	.13319
6	-0.15140E +01	169E.00000	.02253	.15572
7	-0.13958E +01	140E.00000	.02533	.18105
8	-0.12777E +01	198E.00000	.02647	.20752
9	-0.11596E +01	218E.00000	.0275	.23664
10	-0.10414E +01	234E.00000	.02852	.26939
11	-0.92327E +00	234E.00000	.03118	.30057
12	-0.80512E +00	217E.00000	.03290	.33377
13	-0.68698E +00	218E.00000	.02703	.36069
14	-0.56883E +00	220E.00000	.02336	.38971
15	-0.45069E +00	215E.00000	.02472	.41907
16	-0.33254E +00	213E.00000	.02436	.44779
17	-0.21440E +00	214E.00000	.02316	.47615
18	-0.09625E +00	220E.00000	.02253	.50531
19	-0.1880E +00	218E.00000	.02145	.53654
20	-0.0004E +00	224E.00000	.02053	.56626
21	-0.5818E +00	211E.00000	.01100	.59677
21				.62756

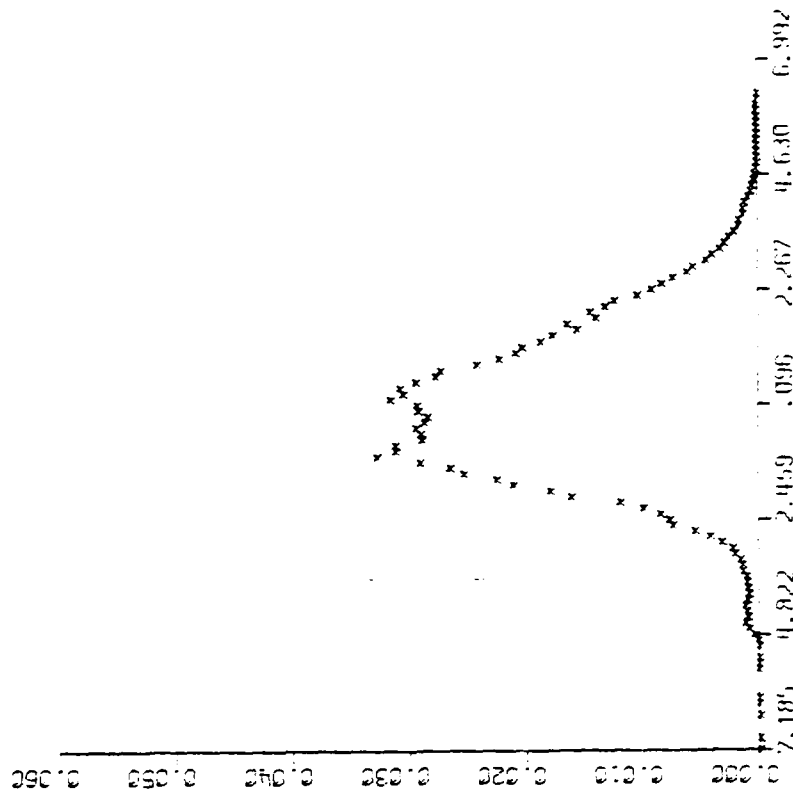


TABLE 3-11. COMPOSITE DISTRIBUTION FUNCTION OF CORRELATION SURFACE OF
TARGET AND BACKGROUND SCENES (Sheet 12 of 20)

INDEX	COEF	HIST	P-001	CUM. PROB
22	.37633E+00	2210.00000	.02941	.65697
23	.44647E+00	2079.00000	.02767	.68464
24	.51762E+00	2059.00000	.02736	.71198
25	.73076E+00	1822.00000	.02425	.73623
26	.86891E+00	1673.00000	.02227	.75869
27	.86703E+00	1571.00000	.02091	.77960
28	.10452E+01	1524.00000	.02028	.79968
29	.12033E+01	1408.00000	.01914	.81862
30	.13151E+01	1327.00000	.01766	.83608
31	.14126E+01	1173.00000	.01561	.85169
32	.15578E+01	1234.00000	.01669	.86818
33	.16759E+01	1055.00000	.01404	.88222
34	.17941E+01	1083.00000	.01449	.89671
35	.19122E+01	995.00000	.01324	.90995
36	.20104E+01	730.00000	.01238	.92213
37	.21485E+01	781.00000	.01042	.93175
38	.22666E+01	683.00000	.00917	.94192
39	.23848E+01	625.00000	.00812	.95024
40	.25029E+01	585.00000	.00725	.95749
41	.25711E+01	455.00000	.00606	.96355
42	.27392E+01	421.00000	.00560	.96915
43	.28574E+01	335.00000	.00466	.97361
44	.29755E+01	299.00000	.00338	.97759
45	.30937E+01	251.00000	.00334	.98093
46	.32118E+01	217.00000	.00289	.98382
47	.33299E+01	190.00000	.00253	.98635
48	.34481E+01	158.00000	.00210	.98845
49	.35662E+01	125.00000	.00166	.99011
50	.36844E+01	123.00000	.00172	.99183
1	.38025E+01	100.00000	.00133	.99316
2	.39207E+01	96.00000	.00128	.99444
3	.40388E+01	91.00000	.00124	.99567
4	.41570E+01	65.00000	.00087	.99654
5	.42751E+01	56.00000	.00075	.99723
6	.43933E+01	44.00000	.00059	.99787
7	.45114E+01	31.00000	.00044	.99831
8	.46295E+01	26.00000	.00035	.99866
9	.47477E+01	17.00000	.00023	.99888
10	.48658E+01	7.00000	.00009	.99898
11	.49840E+01	7.00000	.00009	.99907
12	.51021E+01	5.00000	.00007	.99913
13	.52203E+01	7.00000	.00009	.99923
14	.53384E+01	9.00000	.00012	.99935
15	.54566E+01	4.00000	.00005	.99940
16	.55747E+01	7.00000	.00009	.99949
17	.56928E+01	8.00000	.00011	.99960
18	.58110E+01	8.00000	.00011	.99971
19	.59291E+01	6.00000	.00008	.99979
20	.60473E+01	6.00000	.00008	.99987
21	.61654E+01	4.00000	.00012	.99999
22	.62836E+01	1.00000	.00001	1.00000
COMPOSITE MEAN AND STANDARD DEVIATION				.1488926E+01

TABLE 3-11. COMPOSITE DISTRIBUTION FUNCTION OF CORRELATION SURFACE OF
TARGET AND BACKGROUND SCENES (Sheet 13 of 20)

CROSS CORRELATION
FAWS TARGET 1 2 12 0 14.0000
FAWS 11 AUG 77 1-5 min FILES

INDEX	CORF	HIST	1-13	CUM. PROB
42	-280.171 +01	1.00000	.00002	.00002
41	-275.601 +01	1.00000	.00001	.00003
39	-266.071 +01	2.00000	.00001	.00004
38	-261.311 +01	1.00000	.00001	.00005
37	-256.541 +01	2.00000	.00001	.00006
36	-251.771 +01	1.00000	.00002	.00008
35	-247.011 +01	11.00000	.00007	.00015
34	-242.241 +01	11.00000	.00007	.00023
33	-237.481 +01	11.00000	.00009	.00031
32	-232.711 +01	22.00000	.00015	.00046
31	-227.941 +01	22.00000	.00015	.00061
30	-223.171 +01	35.00000	.00023	.00084
29	-218.411 +01	61.00000	.00041	.00124
28	-213.651 +01	66.00000	.00044	.00168
27	-208.881 +01	95.00000	.00063	.00231
26	-204.111 +01	89.00000	.00059	.00291
25	-199.351 +01	104.00000	.00112	.00403
24	-194.581 +01	181.00000	.00124	.00527
23	-189.821 +01	175.00000	.00119	.00647
22	-185.051 +01	219.00000	.00146	.00792
21	-180.281 +01	236.00000	.00157	.00949
20	-175.521 +01	241.00000	.00164	.01113
19	-170.751 +01	101.00000	.00200	.01314
18	-165.991 +01	125.00000	.00216	.01530
17	-161.221 +01	160.00000	.00210	.01760
16	-156.451 +01	413.00000	.00275	.02035
15	-151.691 +01	409.00000	.00266	.02301
14	-146.921 +01	507.00000	.00337	.02638
13	-142.161 +01	592.00000	.00394	.03032
12	-137.391 +01	612.00000	.00407	.03439
11	-132.621 +01	681.00000	.00453	.03892
10	-127.861 +01	815.00000	.00555	.04447
9	-123.091 +01	934.00000	.00621	.05068
8	-118.331 +01	1051.00000	.00699	.05767
7	-113.561 +01	1174.00000	.00781	.06548
6	-108.791 +01	1240.00000	.00875	.07323
5	-104.01 +01	1411.00000	.00939	.08112
4	-99.241 +01	1579.00000	.01050	.09362
3	-94.471 +01	1704.00000	.01131	.10495
2	-89.701 +01	1854.00000	.01300	.11795
1	-84.931 +01	2232.00000	.01485	.13279
0	-80.161 +01	2375.00000	.01580	.14959
1	-75.391 +01	2546.00000	.01760	.16619
2	-70.621 +01	2680.00000	.01916	.18535
3	-65.851 +01	3212.00000	.02136	.20671
4	-61.081 +01	3485.00000	.02372	.22843
5	-56.311 +01	3792.00000	.02647	.25130
6	-51.541 +01	4060.00000	.02931	.27501
7	-46.771 +01	4660.00000	.03236	.29936
8	-42.001 +01	4660.00000	.03507	.32443
9	-37.231 +01	4660.00000	.03802	.36044
10	-32.461 +01	4700.00000	.04134	.39978
11	-27.691 +01	4888.00000	.04511	.44509
12	-22.921 +01	4220.00000	.04934	.49443
13	-18.151 +01	4220.00000	.05401	.54844

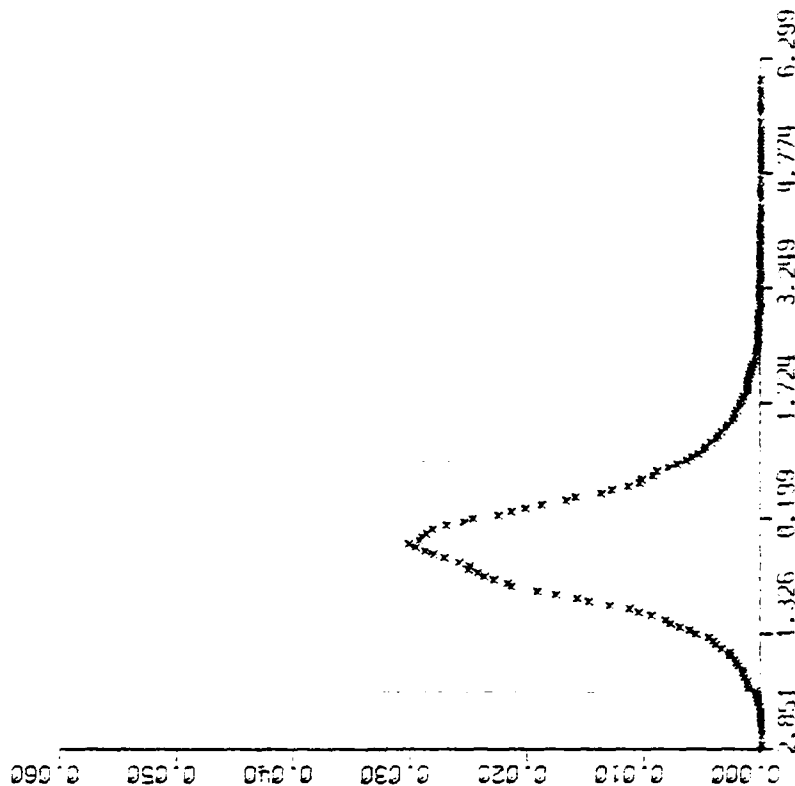


TABLE 3-11. COMPOSITE DISTRIBUTION FUNCTION OF CORRELATION SURFACE OF
TARGET AND BACKGROUND SCENES (Sheet 14 of 20)

PAIR	COEF	MEAN	P-40H	CUM PROB
14	-.21007E+00	4.127E+00000	.02878	.45946
15	-.14241E+00	4.556E+00000	.02304	.48210
16	-.13478E+00	4.535E+00000	.03016	.51427
17	-.14708E+01	4.401E+00000	.02927	.54854
18	-.19428E+01	4.363E+00000	.02906	.57760
19	-.42319E+01	4.119E+00000	.02873	.60613
20	-.55822E+01	4.247E+00000	.02825	.63457
21	-.10355E+00	4.061E+00000	.02701	.66159
22	-.13121E+00	3.826E+00000	.02546	.68705
23	-.19887E+00	3.710E+00000	.02468	.71172
24	-.26653E+00	3.386E+00000	.02252	.73424
25	-.29419E+01	3.219E+00000	.02141	.75566
26	-.34185E+00	3.032E+00000	.02017	.77582
27	-.38951E+00	2.826E+00000	.01880	.79462
28	-.43717E+00	2.508E+00000	.01664	.81130
29	-.48483E+00	2.386E+00000	.01587	.82717
30	-.53249E+00	2.065E+00000	.01374	.84091
31	-.58015E+00	1.923E+00000	.01279	.85370
32	-.62781E+00	1.718E+00000	.01143	.86512
33	-.67547E+00	1.565E+00000	.01041	.87553
34	-.72313E+00	1.526E+00000	.01016	.88570
35	-.77079E+00	1.380E+00000	.00918	.89488
36	-.81845E+00	1.136E+00000	.00889	.90176
37	-.86611E+00	1.192E+00000	.00793	.91169
38	-.91377E+00	1.083E+00000	.00724	.91891
39	-.96143E+00	.959E+00000	.00638	.92531
40	-.10091E+01	.887E+00000	.00590	.93120
41	-.10567E+01	.806E+00000	.00536	.93657
42	-.11040E+01	.741E+00000	.00493	.94149
43	-.11521E+01	.717E+00000	.00477	.94626
44	-.11997E+01	.651E+00000	.00433	.95059
45	-.12476E+01	.572E+00000	.00380	.95440
46	-.12950E+01	.561E+00000	.00374	.95813
47	-.13427E+01	.512E+00000	.00341	.96154
48	-.13904E+01	.449E+00000	.00298	.96451
49	-.14380E+01	.438E+00000	.00291	.96743
50	-.14857E+01	.376E+00000	.00250	.96993
1	-.15333E+01	.366E+00000	.00243	.97336
2	-.15810E+01	.346E+00000	.00210	.97466
3	-.16287E+01	.321E+00000	.00216	.97680
4	-.16763E+01	.266E+00000	.00177	.97857
5	-.17240E+01	.264E+00000	.00176	.98013
6	-.17716E+01	.244E+00000	.00162	.98195
7	-.18193E+01	.227E+00000	.00151	.98346
8	-.18670E+01	.185E+00000	.00124	.98470
9	-.19146E+01	.183E+00000	.00122	.98591
10	-.19623E+01	.176E+00000	.00116	.98707
11	-.20099E+01	.185E+00000	.00123	.98830
12	-.20576E+01	.160E+00000	.00106	.98936
13	-.21053E+01	.147E+00000	.00098	.99034
14	-.21529E+01	.128E+00000	.00085	.99119
15	-.22006E+01	.124E+00000	.00082	.99202
16	-.22482E+01	.100E+00000	.00063	.99268
17	-.22959E+01	.80E+00000	.00053	.99327
18	-.23436E+01	.78E+00000	.00052	.99373
19	-.23912E+01	.67E+00000	.00041	.99415
20	-.24389E+01	.64E+00000	.00033	.99457
21	-.24865E+01	.49E+00000	.00026	.99483
22	-.25342E+01	.40E+00000	.00017	.99510

TABLE 3-11. COMPOSITE DISTRIBUTION FUNCTION OF CORRELATION SURFACE OF
TARGET AND BACKGROUND SCENES (Sheet 15 of 20)

Index	CORF	101ST	P-404	CUM PROB
23	.25419E+01	30.00000	.00026	.99534
24	.25204E+01	41.00000	.00029	.99562
25	.25172E+01	32.00000	.00031	.99586
26	.27248E+01	31.00000	.00022	.99606
27	.27725E+01	35.00000	.00023	.99629
28	.28202E+01	39.00000	.00026	.99655
29	.28678E+01	35.00000	.00023	.99677
30	.29155E+01	38.00000	.00025	.99703
31	.29631E+01	19.00000	.00013	.99715
32	.30108E+01	20.00000	.00011	.99729
33	.30585E+01	20.00000	.00013	.99742
34	.31061E+01	31.00000	.00021	.99763
35	.31538E+01	21.00000	.00014	.99777
36	.32014E+01	15.00000	.00010	.99786
37	.32491E+01	19.00000	.00013	.99799
38	.32968E+01	23.00000	.00015	.99814
39	.33444E+01	19.00000	.00013	.99827
40	.33921E+01	15.00000	.00010	.99837
41	.34397E+01	16.00000	.00011	.99848
42	.34874E+01	8.00000	.00005	.99853
43	.35351E+01	13.00000	.00009	.99862
44	.35827E+01	12.00000	.00008	.99870
45	.36304E+01	22.00000	.00015	.99884
46	.36780E+01	15.00000	.00010	.99894
47	.37257E+01	12.00000	.00008	.99902
48	.37734E+01	16.00000	.00009	.99912
49	.38210E+01	16.00000	.00011	.99922
50	.38687E+01	8.00000	.00005	.99928
51	.39163E+01	9.00000	.00006	.99933
52	.39640E+01	9.00000	.00006	.99939
53	.40116E+01	10.00000	.00007	.99946
54	.40593E+01	5.00000	.00003	.99949
55	.41070E+01	11.00000	.00007	.99957
56	.41546E+01	1.00000	.00001	.99957
57	.42023E+01	2.00000	.00001	.99959
58	.42499E+01	1.00000	.00001	.99959
59	.42976E+01	5.00000	.00003	.99961
60	.43452E+01	1.00000	.00002	.99965
61	.43929E+01	1.00000	.00002	.99967
62	.44406E+01	1.00000	.00001	.99967
63	.44882E+01	1.00000	.00001	.99967
64	.45359E+01	2.00000	.00001	.99969
65	.45836E+01	1.00000	.00002	.99971
66	.46313E+01	2.00000	.00001	.99972
67	.46789E+01	2.00000	.00001	.99973
68	.47266E+01	1.00000	.00001	.99974
69	.47743E+01	4.00000	.00001	.99977
70	.48219E+01	2.00000	.00001	.99978
71	.48696E+01	1.00000	.00001	.99979
72	.49172E+01	1.00000	.00001	.99979
73	.49648E+01	1.00000	.00001	.99979
74	.50125E+01	1.00000	.00001	.99979
75	.50602E+01	1.00000	.00001	.99980
76	.51078E+01	1.00000	.00001	.99981
77	.51555E+01	1.00000	.00002	.99983
78	.52031E+01	1.00000	.00001	.99984
79	.52508E+01	4.00000	.00001	.99986
80	.52985E+01	2.00000	.00001	.99987
81	.53461E+01	1.00000	.00001	.99988
82	.53938E+01	1.00000	.00001	.99989
83	.54414E+01	1.00000	.00002	.99991
84	.54891E+01	1.00000	.00002	.99994
85	.55367E+01	1.00000	.00002	.99994

TABLE 3-11. COMPOSITE DISTRIBUTION FUNCTION OF CORRELATION SURFACE OF
TARGET AND BACKGROUND SCENES (Sheet 16 of 20)

INDEX	COEF	TEST	P-004	CUM. PROB
08	.567971+01	1.00000	.00001	.99999
09	.512764+01	3.00000	.00002	.99995
11	.542271+01	3.00000	.00002	.99997
12	.547964+01	2.00000	.00001	.99999
14	.576574+01	1.00000	.00001	.99999
15	.601364+01	1.00000	.00001	1.00000

COMPOSITE MEAN AND STANDARD DEVIATION -.967314561-01 .757459801+00

TABLE 3-11. COMPOSITE DISTRIBUTION FUNCTION OF CORRELATION SURFACE OF
TARGET AND BACKGROUND SCENES (Sheet 17 of 20)

CROSS CORRELATION
FAM'S TAHOE 7 12 0 36.068
FAMS 4 410 77 1-5 WD ASPHALT ROADS

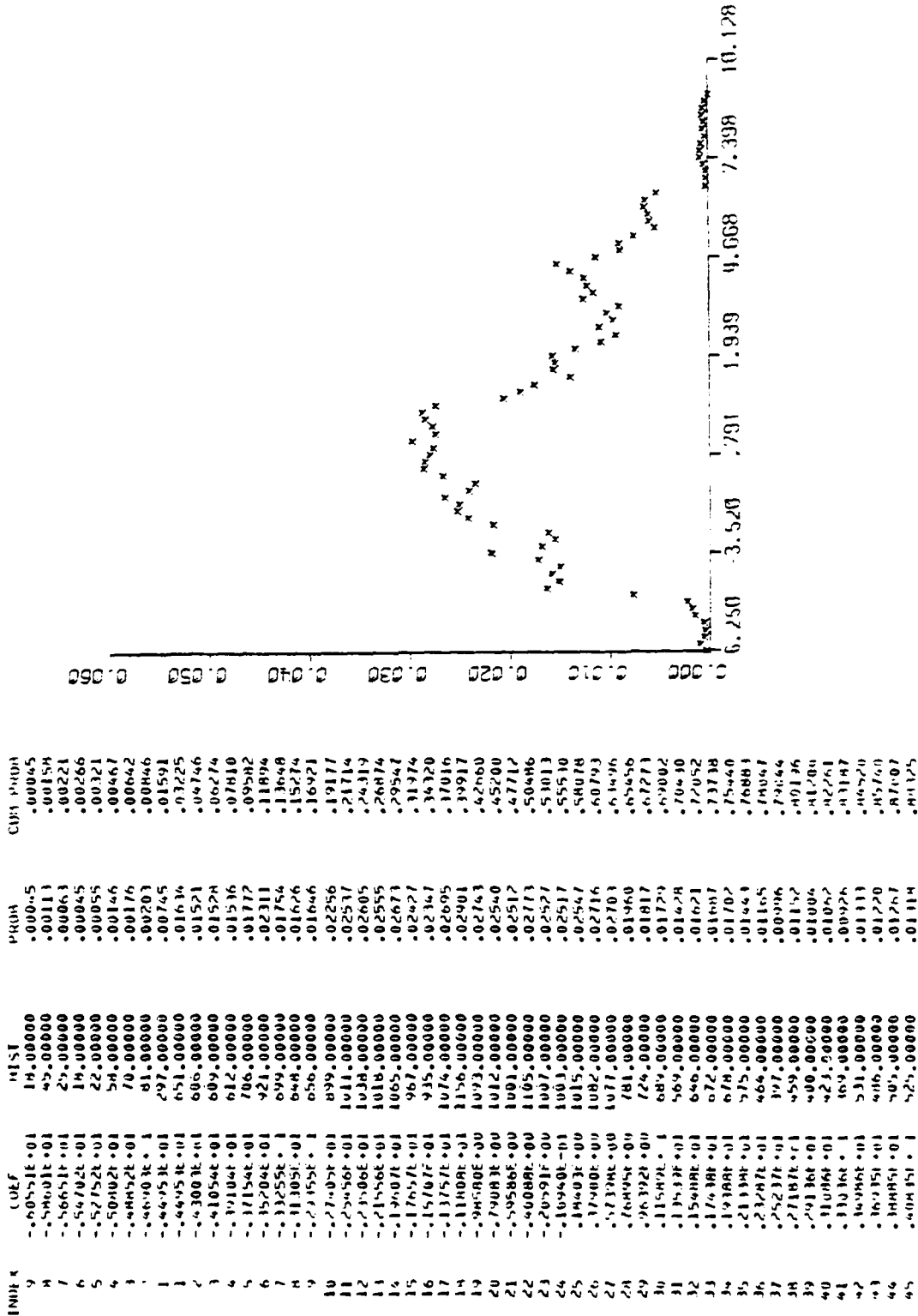


TABLE 3-11. COMPOSITE DISTRIBUTION FUNCTION OF CORRELATION SURFACE OF
TARGET AND BACKGROUND SCENES (Sheet 18 of 20)

INDEX	COEF	TEST	P-VALUE	CUM. PROB.
46	.42784E+01	585.00000	.01464	.89791
47	.44734E+01	634.00000	.01601	.91194
48	.46684E+01	662.00000	.01159	.92554
49	.48634E+01	356.00000	.00493	.93447
50	.50583E+01	373.00000	.00916	.94141
1	.52533E+01	328.00000	.00423	.95206
2	.54483E+01	244.00000	.00612	.95819
3	.56432E+01	267.00000	.00670	.96489
4	.58382E+01	270.00000	.00674	.97167
5	.60332E+01	287.00000	.00720	.97887
6	.62282E+01	245.00000	.00715	.98502
7	.64231E+01	237.00000	.00595	.99117
8	.66181E+01	15.00000	.00034	.99235
9	.68131E+01	12.00000	.00030	.99265
10	.70080E+01	12.00000	.00030	.99295
11	.72030E+01	27.00000	.00064	.99363
12	.73980E+01	42.00000	.00105	.99468
13	.75930E+01	42.00000	.00105	.99571
14	.77879E+01	34.00000	.00085	.99659
15	.79829E+01	14.00000	.00045	.99704
16	.81779E+01	25.00000	.00061	.99767
17	.83729E+01	29.00000	.00050	.99817
18	.85678E+01	29.00000	.00073	.99890
19	.87628E+01	25.00000	.00063	.99952
20	.89578E+01	17.00000	.00041	.99995
21	.91527E+01	2.00000	.00005	1.00000
COMPOSITE MEAN AND STANDARD DEVIATION				.454821657E-01
				.29102194E+01

TABLE 3-11. COMPOSITE DISTRIBUTION FUNCTION OF CORRELATION SURFACE OF
TARGET AND BACKGROUND SCENES (Sheet 19 of 20)

COMPOSITE OF 5 FILES
(ROSS CORRELATION)
FAWS TAPE 1 / 11 47 23.9
FAWS TAPE 77 1-5 WITH BUILDINGS

INDEX	CORF	WIST	PRAM	CUM PRAM
1	-2.7375E+01	17.00000	.00077	.00077
2	-2.71133E+01	25.00000	.00103	.00180
3	-2.68515E+01	43.00000	.00195	.00375
4	-2.65915E+01	86.00000	.00300	.00675
5	-2.63300E+01	95.00000	.00449	.01124
6	-2.60682E+01	100.00000	.00601	.01725
7	-2.58064E+01	165.00000	.00749	.02474
8	-2.55446E+01	188.00000	.00853	.03327
9	-2.52828E+01	243.00000	.01103	.04430
10	-2.50209E+01	250.00000	.01162	.05592
11	-2.47591E+01	317.00000	.01419	.07011
12	-2.44972E+01	345.00000	.01566	.08577
13	-2.42354E+01	506.00000	.02287	.10864
14	-2.39735E+01	581.00000	.02637	.13501
15	-2.37117E+01	713.00000	.03263	.16764
16	-2.34498E+01	753.00000	.03445	.20209
17	-2.31880E+01	876.00000	.03866	.24075
18	-2.29261E+01	925.00000	.04173	.28248
19	-2.26643E+01	980.00000	.04447	.32695
20	-2.24024E+01	163.00000	.03463	.36274
21	-2.21406E+01	621.00000	.02818	.39092
22	-2.18787E+01	493.00000	.02237	.41330
23	-2.16169E+01	507.00000	.02301	.43631
24	-2.13550E+01	581.00000	.02412	.46043
25	-2.10932E+01	486.00000	.02617	.48660
26	-2.08313E+01	486.00000	.02197	.50857
27	-2.05695E+01	150.00000	.01616	.52473
28	-2.03076E+01	362.00000	.01582	.54055
29	-2.00458E+01	293.00000	.01203	.55258
30	-1.97839E+01	266.00000	.01130	.56388
31	-1.95220E+01	261.00000	.01198	.57586
32	-1.92602E+01	256.00000	.01184	.58770
33	-1.90000E+01	273.00000	.01239	.60009
34	-1.87398E+01	243.00000	.01284	.61293
35	-1.84796E+01	261.00000	.01184	.62477
36	-1.82194E+01	256.00000	.01162	.63640
37	-1.79592E+01	270.00000	.01225	.64865
38	-1.76990E+01	307.00000	.01493	.66358
39	-1.74388E+01	237.00000	.01448	.67806
40	-1.71786E+01	346.00000	.01570	.69376
41	-1.69184E+01	351.00000	.01593	.70969
42	-1.66582E+01	425.00000	.01939	.72908
43	-1.63980E+01	531.00000	.02410	.75318
44	-1.61378E+01	695.00000	.03154	.78472
45	-1.58776E+01	857.00000	.03683	.82155
46	-1.56174E+01	745.00000	.03301	.85456
47	-1.53572E+01	516.00000	.02362	.87818
48	-1.50970E+01	461.00000	.02144	.89962
49	-1.48368E+01	232.00000	.01053	.91015
50	-1.45766E+01	90.00000	.00404	.91419

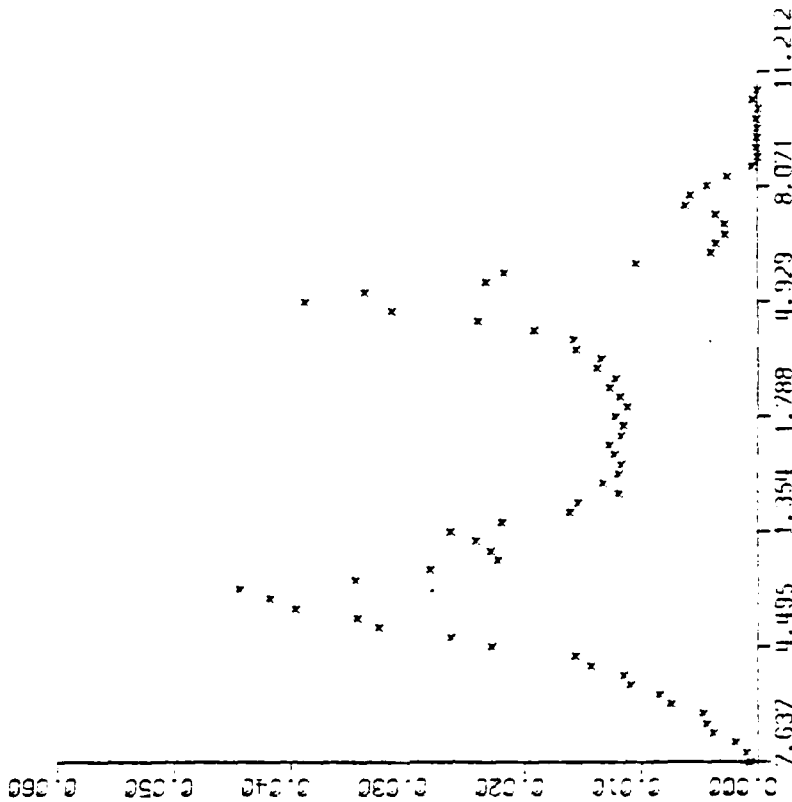


TABLE 3-11. COMPOSITE DISTRIBUTION FUNCTION OF CORRELATION SURFACE OF
TARGET AND BACKGROUND SCENES (Sheet 20 of 20)

Index	COEF	HIST	PRON	CUM PRON
2	.64998E+01	81.00000	.00368	.96928
3	.67616E+01	63.00000	.00286	.97214
4	.70234E+01	65.00000	.00295	.97509
5	.72852E+01	82.00000	.00372	.97881
6	.75470E+01	119.00000	.00631	.98511
7	.78087E+01	129.00000	.00585	.99097
8	.80705E+01	98.00000	.00445	.99542
9	.83323E+01	59.00000	.00268	.99809
10	.85941E+01	13.00000	.00059	.99868
11	.88559E+01	2.00000	.00009	.99877
12	.91177E+01	4.00000	.00018	.99896
13	.93795E+01	3.00000	.00014	.99909
14	.96413E+01	2.00000	.00009	.99918
15	.99031E+01	5.00000	.00023	.99941
16	.10165E+02	1.00000	.00005	.99946
17	.10427E+02	10.00000	.00045	.99991
18	.10689E+02	2.00000	.00009	1.00000
COMPOSITE MEAN AND STANDARD DEVIATION				-.11973089E-01
				.36813289E+01

TABLE 3-12. COMPOSITE DISTRIBUTION OF CROSS-CORRELATION SURFACE OF TARGET MASK AND BACKGROUND

COMPOSITE OF 17 FILES
CROSS CORRELATION
FAMS TARGET 1 MASK 11 47 23.9
FAMS N AUG 77 4-5 MB GRASS

INDEX	COEF	MEAN	PRCH	CUM PRCH
39	-1.0216E+02	1.00000	.00001	.00001
38	-9.1402E+01	2.00000	.00003	.00004
37	-8.9499E+01	1.00000	.00001	.00005
36	-7.7863E+01	30.00000	.00040	.00045
35	-7.6829E+01	93.00000	.00057	.00102
34	-7.7020E+01	59.00000	.00077	.00180
33	-7.3211E+01	63.00000	.00084	.00264
32	-7.7140E+01	63.00000	.00084	.00347
31	-6.9599E+01	49.00000	.00065	.00413
30	-6.7784E+01	59.00000	.00072	.00484
29	-6.5975E+01	61.00000	.00081	.00566
28	-6.6416E+01	69.00000	.00092	.00657
27	-6.2356E+01	64.00000	.00085	.00743
26	-6.0567E+01	89.00000	.00113	.00856
25	-5.8748E+01	72.00000	.00096	.00952
24	-5.6929E+01	80.00000	.00106	.01058
23	-5.5120E+01	87.00000	.00116	.01174
22	-5.3311E+01	116.00000	.00154	.01328
21	-5.1502E+01	106.00000	.00138	.01467
20	-4.9693E+01	142.00000	.00189	.01656
19	-4.7884E+01	172.00000	.00229	.01884
18	-4.6075E+01	165.00000	.00220	.02104
17	-4.4266E+01	177.00000	.00236	.02340
16	-4.2457E+01	300.00000	.00399	.02739
15	-4.0648E+01	439.00000	.00594	.03323
14	-3.8839E+01	542.00000	.00570	.03893
13	-3.7029E+01	542.00000	.00721	.04614
12	-3.5220E+01	568.00000	.00756	.05370
11	-3.3411E+01	606.00000	.00804	.06174
10	-3.1602E+01	836.00000	.01110	.07284
9	-2.9793E+01	1049.00000	.01396	.08680
8	-2.7984E+01	1232.00000	.01640	.10319
7	-2.6175E+01	1407.00000	.01873	.12192
6	-2.4366E+01	1712.00000	.02278	.14470
5	-2.2557E+01	1994.00000	.02654	.17124
4	-2.0748E+01	2052.00000	.02731	.19855
3	-1.8939E+01	2273.00000	.03075	.22880
2	-1.7129E+01	2396.00000	.03189	.26069
1	-1.5320E+01	2666.00000	.03016	.29084
0	-1.3511E+01	2666.00000	.02742	.31826
-1	-1.1702E+01	2032.00000	.02750	.34575
-2	-9.8911E+00	2032.00000	.02704	.37280
-3	-8.0094E+00	2030.00000	.02718	.39997
-4	-6.2750E+00	2127.00000	.02702	.42699
-5	-4.4659E+00	2127.00000	.02831	.45530
-6	-2.6568E+00	2087.00000	.02824	.48354
-7	-8.4775E-01	2325.00000	.03094	.51331
-8	-6.6138E-01	2305.00000	.03068	.54275
-9	-2.7704E-01	2317.00000	.03084	.57293
-10	-4.5795E-01	2204.00000	.02933	.60377
-11	-6.3886E-01	2065.00000	.02748	.63310
-12	-8.1977E-01	2067.00000	.02744	.66058
-13	-1.0007E+01	1944.00000	.02544	.68782
-14				.71236

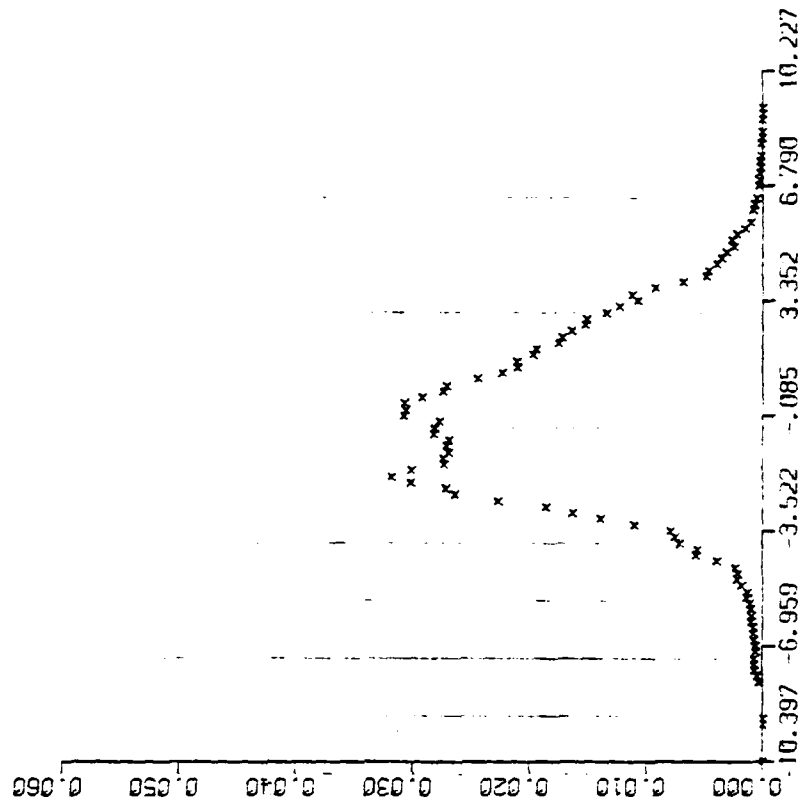


TABLE 3-12. COMPOSITE DISTRIBUTION OF CROSS-CORRELATION SURFACE OF
TARGET MASK AND BACKGROUND (Sheet 2 of 20)

LINE #	CORR	TEST	P-VAL	CUM PROB
26	.11816E+01	1081.00000	.02240	.73476
27	.13623E+01	1586.00000	.02111	.75587
28	.15434E+01	1594.00000	.02121	.77708
29	.17243E+01	1491.00000	.01984	.79693
30	.19052E+01	1462.00000	.01946	.81638
31	.20861E+01	1325.00000	.01763	.83402
32	.22670E+01	1101.00000	.01731	.85133
33	.24479E+01	1243.00000	.01654	.86787
34	.26288E+01	1150.00000	.01530	.88318
35	.28098E+01	1143.00000	.01521	.89819
36	.29907E+01	1017.00000	.01351	.91192
37	.31716E+01	924.00000	.01236	.92429
38	.33525E+01	813.00000	.01082	.93511
39	.35334E+01	852.00000	.01134	.94645
40	.37143E+01	698.00000	.00729	.95574
41	.38952E+01	520.00000	.00632	.96266
42	.40761E+01	371.00000	.00494	.96759
43	.42570E+01	352.00000	.00468	.97228
44	.44379E+01	300.00000	.00399	.97627
45	.46188E+01	270.00000	.00359	.97986
46	.47997E+01	237.00000	.00315	.98302
47	.49806E+01	190.00000	.00253	.98555
48	.51615E+01	200.00000	.00266	.98821
49	.53424E+01	173.00000	.00230	.99051
50	.55233E+01	120.00000	.00160	.99211
1	.57042E+01	83.00000	.00110	.99324
2	.58851E+01	86.00000	.00114	.99436
3	.60660E+01	68.00000	.00080	.99526
4	.62469E+01	58.00000	.00077	.99603
5	.64278E+01	46.00000	.00061	.99665
6	.66087E+01	44.00000	.00059	.99723
7	.67896E+01	31.00000	.00044	.99767
8	.69705E+01	31.00000	.00044	.99811
9	.71514E+01	26.00000	.00044	.99846
10	.73323E+01	14.00000	.00019	.99864
11	.75132E+01	20.00000	.00027	.99891
12	.76941E+01	14.00000	.00019	.99910
13	.78750E+01	13.00000	.00017	.99927
14	.80559E+01	14.00000	.00019	.99945
15	.82368E+01	9.00000	.00012	.99957
16	.84177E+01	9.00000	.00012	.99969
17	.85986E+01	6.00000	.00004	.99977
18	.87795E+01	4.00000	.00005	.99983
19	.89604E+01	3.00000	.00004	.99987
20	.91413E+01	5.00000	.00007	.99991
21	.93222E+01	5.00000	.00007	1.00000
COMPOSITE MEAN AND STANDARD DEVIATION				.2120744E+01

TABLE 3-12. COMPOSITE DISTRIBUTION OF CROSS-CORRELATION SURFACE OF
TARGET MASK AND BACKGROUND (Sheet 3 of 20)

COMPOSITE OF (a) AND (b)

CROSS CORRELATION

FWT TARGET 1.455 13.47 23.0

FWT 9 AUG 77 1000 121.5

INDEX	COEF	WST	PROF	CUM PROF
16	-0.00777801	1.76000	.00001	.00001
17	-0.00663501	2.00000	.00002	.00002
18	-0.00462501	6.00000	.00004	.00006
19	-0.00362501	16.00000	.00011	.00017
20	-0.00360000	24.00000	.00017	.00033
21	-0.00291001	56.00000	.00037	.00070
22	-0.00217001	94.00000	.00062	.00132
23	-0.00156001	101.00000	.00067	.00199
24	-0.00085001	111.00000	.00087	.00286
25	-0.00210001	176.00000	.00111	.00399
26	-0.00090001	220.00000	.00152	.00551
27	-0.00087001	294.00000	.00156	.00706
28	-0.00077001	251.00000	.00167	.00873
29	-0.00050001	246.00000	.00186	.01060
30	-0.00039001	344.00000	.00220	.01280
31	-0.00010001	319.00000	.00226	.01496
32	-0.00000001	396.00000	.00247	.01743
33	-0.00000001	546.00000	.00297	.02040
34	-0.00000001	602.00000	.00321	.02361
35	-0.00000001	644.00000	.00322	.02683
36	-0.00000001	644.00000	.00369	.03052
37	-0.00000001	519.00000	.00383	.03435
38	-0.00000001	681.00000	.00453	.03888
39	-0.00000001	701.00000	.00466	.04354
40	-0.00000001	610.00000	.00543	.04897
41	-0.00000001	647.00000	.00563	.05460
42	-0.00000001	1006.00000	.00669	.06129
43	-0.00000001	1131.00000	.00754	.06883
44	-0.00000001	1331.00000	.00887	.07770
45	-0.00000001	1531.00000	.01000	.08770
46	-0.00000001	1672.00000	.01112	.09882
47	-0.00000001	1756.00000	.01160	.11042
48	-0.00000001	2314.00000	.01380	.12422
49	-0.00000001	2406.00000	.01600	.14022
50	-0.00000001	2519.00000	.01675	.15697
51	-0.00000001	2674.00000	.01773	.17470
52	-0.00000001	2927.00000	.01877	.19347
53	-0.00000001	3125.00000	.02077	.21424
54	-0.00000001	3474.00000	.02313	.23737
55	-0.00000001	3630.00000	.02654	.26391
56	-0.00000001	3456.00000	.02663	.29054
57	-0.00000001	3745.00000	.02691	.31745
58	-0.00000001	4048.00000	.02656	.34401
59	-0.00000001	4126.00000	.02640	.37041
60	-0.00000001	4411.00000	.02648	.39689
61	-0.00000001	5136.00000	.02617	.42306
62	-0.00000001	4919.00000	.02599	.44905
63	-0.00000001	5170.00000	.02567	.47472
64	-0.00000001	4176.00000	.02579	.50051
65	-0.00000001	4155.00000	.02566	.52617
66	-0.00000001	4338.00000	.02586	.55203
67	-0.00000001	4315.00000	.02574	.57777

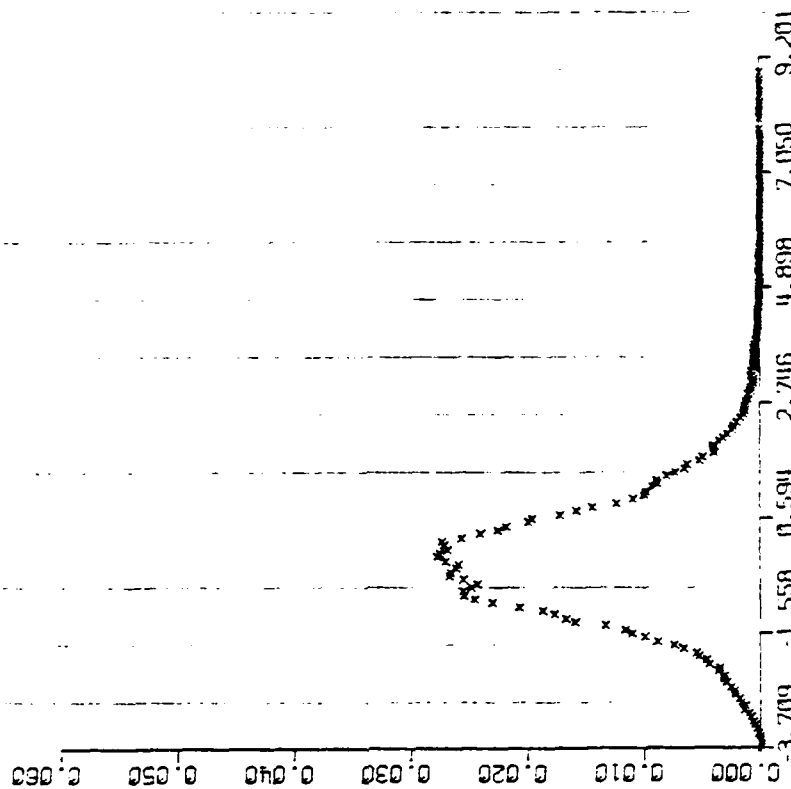


TABLE 3-12. COMPOSITE DISTRIBUTION OF CROSS-CORRELATION SURFACE OF
TARGET MASK AND BACKGROUND (Sheet 4 of 20)

END-X	COR-F	WIST	POCH	CUM FROM
19	16.184E+01	611.00000	.02734	.05715
20	2.155E+02	186.00000	.02570	.08285
21	5.973E+01	56.10000	.02406	.10691
22	3.730E+02	119.00000	.02240	.12931
23	6.577E+01	110.00000	.02184	.15115
24	5.274E+03	933.00000	.01967	.17082
25	2.142E+00	235.00000	.01781	.18863
26	6.649E+01	76.10000	.01586	.20449
27	7.376E+00	218.00000	.01451	.21900
28	5.111E+02	1871.00000	.01284	.23184
29	3.624E+00	1652.00000	.01099	.24283
30	1.324E+01	153.00000	.01000	.25283
31	1.040E+01	144.00000	.00923	.26206
32	1.154E+01	134.00000	.00867	.27073
33	1.234E+01	124.00000	.00805	.27878
34	1.311E+01	115.00000	.00743	.28621
35	1.384E+01	105.00000	.00681	.29302
36	1.457E+01	94.00000	.00626	.29928
37	1.527E+01	83.00000	.00574	.30502
38	1.594E+01	72.00000	.00520	.31022
39	1.667E+01	61.00000	.00466	.31488
40	1.734E+01	50.00000	.00412	.31900
41	1.797E+01	40.00000	.00359	.32259
42	1.857E+01	30.00000	.00305	.32564
43	1.914E+01	20.00000	.00251	.32815
44	1.967E+01	10.00000	.00197	.33012
45	2.017E+01	0.00000	.00143	.33155
46	2.064E+01	0.00000	.00089	.33244
47	2.108E+01	0.00000	.00035	.33279
48	2.149E+01	0.00000	.00026	.33305
49	2.187E+01	0.00000	.00017	.33322
50	2.222E+01	0.00000	.00011	.33333
51	2.254E+01	0.00000	.00007	.33340
52	2.283E+01	0.00000	.00004	.33344
53	2.309E+01	0.00000	.00002	.33346
54	2.332E+01	0.00000	.00001	.33347
55	2.352E+01	0.00000	.00000	.33347
56	2.369E+01	0.00000	.00000	.33347
57	2.383E+01	0.00000	.00000	.33347
58	2.394E+01	0.00000	.00000	.33347
59	2.403E+01	0.00000	.00000	.33347
60	2.410E+01	0.00000	.00000	.33347
61	2.415E+01	0.00000	.00000	.33347
62	2.419E+01	0.00000	.00000	.33347
63	2.421E+01	0.00000	.00000	.33347
64	2.422E+01	0.00000	.00000	.33347
65	2.423E+01	0.00000	.00000	.33347
66	2.423E+01	0.00000	.00000	.33347
67	2.423E+01	0.00000	.00000	.33347
68	2.423E+01	0.00000	.00000	.33347
69	2.423E+01	0.00000	.00000	.33347
70	2.423E+01	0.00000	.00000	.33347
71	2.423E+01	0.00000	.00000	.33347
72	2.423E+01	0.00000	.00000	.33347
73	2.423E+01	0.00000	.00000	.33347
74	2.423E+01	0.00000	.00000	.33347
75	2.423E+01	0.00000	.00000	.33347
76	2.423E+01	0.00000	.00000	.33347
77	2.423E+01	0.00000	.00000	.33347

TABLE 3-12.

1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422
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TABLE 3-12. COMPOSITE DISTRIBUTION OF CROSS-CORRELATION SURFACE OF
TARGET MASK AND BACKGROUND (Sheet 6 of 20)

IMR 91	CO-F	WIS	PMCH	COF FROM
	.4145E+01	1.70000	.00001	1.00000
COMPOSITE MEAN AND STANDARD DEVIATION -.14914708E+30 .11459473E+01				

TABLE 3-12. COMPOSITE DISTRIBUTION OF CROSS-CORRELATION SURFACE OF
TARGET MASK AND BACKGROUND (Sheet 8 of 20)

INDEX	COEF	MEAN	STDEV	CUM. PROB
1	.61109E+01	44.00000	.01112	.40636
2	.60000E+01	45.00000	.01074	.91658
3	.60000E+01	46.00000	.01072	.92710
4	.60000E+01	47.00000	.01015	.93415
5	.60000E+01	48.00000	.00893	.94708
6	.60000E+01	49.00000	.00722	.95450
7	.60000E+01	50.00000	.00670	.96070
8	.60000E+01	51.00000	.00635	.96506
9	.60000E+01	52.00000	.00604	.96910
10	.60000E+01	53.00000	.00565	.97374
11	.60000E+01	54.00000	.00515	.97789
12	.60000E+01	55.00000	.00475	.98225
13	.60000E+01	56.00000	.00406	.98631
14	.60000E+01	57.00000	.00250	.98881
15	.60000E+01	58.00000	.00215	.99156
16	.60000E+01	59.00000	.00164	.99470
17	.60000E+01	60.00000	.00079	.99499
18	.60000E+01	61.00000	.00032	.99531
19	.60000E+01	62.00000	.00025	.99556
20	.60000E+01	63.00000	.00043	.99598
21	.60000E+01	64.00000	.00016	.99632
22	.60000E+01	65.00000	.00036	.99668
23	.60000E+01	66.00000	.00047	.99716
24	.60000E+01	67.00000	.00079	.99745
25	.60000E+01	68.00000	.00050	.99795
26	.60000E+01	69.00000	.00063	.99858
27	.60000E+01	70.00000	.00070	.99928
28	.60000E+01	71.00000	.00070	.99998
29	.60000E+01	72.00000	.00007	1.00000
30	.60000E+01	73.00000	.00007	1.00000

MEAN AND STANDARD DEVIATION

MEAN = 53.344375E-02

STDEV = 4.36334E-01

TABLE 3-12. COMPOSITE DISTRIBUTION OF CROSS-CORRELATION SURFACE OF
TARGET MASK AND BACKGROUND (Sheet 9 of 20)

COMPOSITE OF 5 FILES
CROSS CORRELATION
FADs TARGET 1 MASK 11 47 21.9
FADs 0 AUG 11 1-5 40 BUILDINGS

INDEX	CONF	INST	PRCH	CUM PRCH
1	-117411.02	13.00000	.00059	.00059
2	-1113611.02	33.00000	.00214	.00214
3	-107441.02	33.00000	.00150	.00364
4	-107441.02	48.00000	.00399	.00767
5	-107441.02	97.00000	.00440	.01207
6	-107441.02	99.00000	.00449	.01656
7	-107441.02	136.00000	.00617	.02274
8	-107441.02	104.00000	.00744	.03018
9	-107441.02	210.00000	.00953	.03971
10	-107441.02	262.00000	.01189	.05160
11	-107441.02	103.00000	.01375	.06535
12	-107441.02	133.00000	.01520	.08055
13	-107441.02	191.00000	.01774	.09830
14	-107441.02	105.00000	.02292	.12122
15	-107441.02	58.00000	.02650	.14772
16	-107441.02	69.00000	.03168	.17940
17	-107441.02	85.3.00000	.03871	.21811
18	-107441.02	711.00000	.04134	.25945
19	-107441.02	744.00000	.03376	.29322
20	-107441.02	573.00000	.02600	.31922
21	-107441.02	532.00000	.02414	.34336
22	-107441.02	671.00000	.02138	.36474
23	-107441.02	425.00000	.01929	.38403
24	-107441.02	623.00000	.02827	.41230
25	-107441.02	641.00000	.02909	.44139
26	-107441.02	497.00000	.02256	.46394
27	-107441.02	483.00000	.02192	.48586
28	-107441.02	476.00000	.02133	.50719
29	-107441.02	412.00000	.01970	.52689
30	-107441.02	380.00000	.01725	.54314
31	-107441.02	352.00000	.01597	.55911
32	-107441.02	394.00000	.01788	.57699
33	-107441.02	341.00000	.01548	.59247
34	-107441.02	361.00000	.01614	.60865
35	-107441.02	350.00000	.01588	.62473
36	-107441.02	391.00000	.01774	.64248
37	-107441.02	356.00000	.01616	.65863
38	-107441.02	380.00000	.01725	.67588
39	-107441.02	409.00000	.01856	.69444
40	-107441.02	389.00000	.01765	.71209
41	-107441.02	467.00000	.02119	.73329
42	-107441.02	434.00000	.01770	.75099
43	-107441.02	447.00000	.02029	.77127
44	-107441.02	477.00000	.02165	.79292
45	-107441.02	527.00000	.02392	.81683
46	-107441.02	552.00000	.02505	.84188
47	-107441.02	463.00000	.02101	.86289
48	-107441.02	442.00000	.02006	.88295
49	-107441.02	510.00000	.02314	.90610
50	-107441.02	525.00000	.02314	.92924
51	-107441.02	441.00000	.02001	.94925
52	-107441.02	447.00000	.01575	.96500
53	-107441.02	194.00000	.00880	.97380
54	-107441.02	413.00000	.00377	.97757

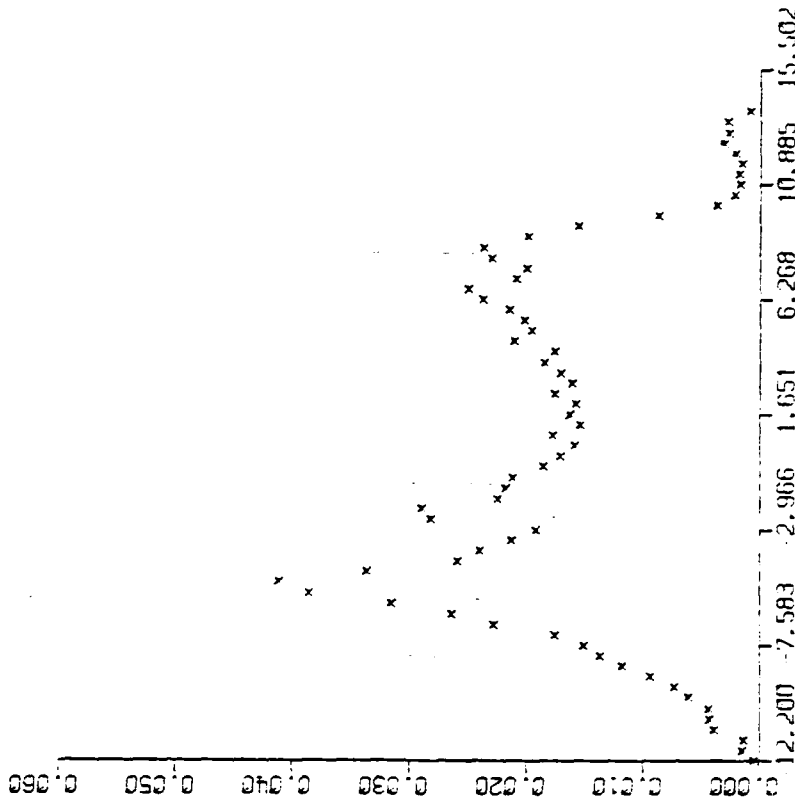


TABLE 3-12. COMPOSITE DISTRIBUTION OF CROSS-CORRELATION SURFACE OF
TARGET MASK AND BACKGROUND (Sheet 10 of 20)

AREA	COEF	HIST	P400	CUM PR00
2	.10452+02	50.00000	.00227	.98253
3	.10452+02	40.00000	.00142	.98395
4	.11104+02	41.00000	.00186	.98581
5	.11724+02	37.00000	.00168	.98749
6	.12144+02	42.00000	.00222	.98971
7	.12564+02	70.00000	.00318	.99289
8	.12983+02	62.00000	.00281	.99570
9	.13403+02	64.00000	.00290	.99860
10	.13823+02	22.00000	.00100	1.00000
COMPOSITE MEAN AND STANDARD DEVIATION .1946736E-01 .57474925E+01				

TABLE 3-12. COMPOSITE DISTRIBUTION OF CROSS-CORRELATION SURFACE OF
TARGET MASK AND BACKGROUND (Sheet 11 of 20)

COMPOSITE OF 17 FILES
CROSS CORRELATION
FAAS TARGET MASK 12 D 34.06H
FAAS 0 AUG 77 1-5 MU GRASS

INDEX	COEF	MIN	PRM	CUM PRM
19	-.70950E+01	1.00000	.00001	.00001
35	-.65640E+01	1.00000	.00001	.00001
32	-.62017E+01	2.00000	.00001	.00005
31	-.60130E+01	1.00000	.00001	.00007
26	-.56352E+01	2.00000	.00001	.00009
24	-.51797E+01	2.00000	.00032	.00041
23	-.50519E+01	57.00000	.00076	.00117
22	-.49242E+01	73.00000	.00100	.00217
21	-.47964E+01	84.00000	.00112	.00329
20	-.46687E+01	80.00000	.00106	.00435
19	-.45409E+01	93.00000	.00124	.00559
18	-.44132E+01	84.00000	.00112	.00671
17	-.42854E+01	65.00000	.00087	.00757
16	-.41577E+01	77.00000	.00102	.00860
15	-.40299E+01	79.00000	.00105	.00965
14	-.39022E+01	74.00000	.00098	.01063
13	-.37744E+01	94.00000	.00110	.01174
12	-.36467E+01	96.00000	.00128	.01327
11	-.35190E+01	87.00000	.00116	.01437
10	-.33912E+01	129.00000	.00172	.01609
9	-.32634E+01	169.00000	.00225	.01834
8	-.31357E+01	214.00000	.00285	.02119
7	-.30079E+01	280.00000	.00373	.02491
6	-.28802E+01	348.00000	.00461	.02954
5	-.27524E+01	492.00000	.00655	.03609
4	-.26247E+01	562.00000	.00748	.04357
3	-.24969E+01	627.00000	.00834	.05192
2	-.23692E+01	649.00000	.00864	.06055
1	-.22414E+01	789.00000	.01050	.07105
0	-.21137E+01	1019.00000	.01356	.08462
1	-.19859E+01	1252.00000	.01666	.10128
2	-.18582E+01	1415.00000	.01881	.12011
3	-.17304E+01	1676.00000	.02231	.14241
4	-.16027E+01	1920.00000	.02732	.16811
5	-.14749E+01	2128.00000	.02555	.19164
6	-.13472E+01	2415.00000	.02432	.22000
7	-.12194E+01	2785.00000	.02124	.25214
8	-.10917E+01	2940.00000	.01176	.28388
9	-.96398E+00	2755.00000	.01114	.31501
10	-.83619E+00	2214.00000	.03001	.34504
11	-.70840E+00	2100.00000	.02795	.37450
12	-.58060E+00	2120.00000	.02821	.40245
13	-.45281E+00	2133.00000	.02836	.42982
14	-.32502E+00	2230.00000	.02867	.45502
15	-.19723E+00	2201.00000	.02968	.48749
16	-.06944E+00	2270.00000	.02912	.51717
17	.05867E+00	2374.00000	.03021	.54649
18	.18611E+00	2552.00000	.03165	.57670
19	.31356E+00	2710.00000	.02297	.60834
20	.44111E+00	2710.00000	.02007	.63832
21	.56866E+00	1706.00000	.02401	.66638
22	.69621E+00	1706.00000	.02537	.69441
23	.82376E+00	1706.00000	.02776	.72178
24	.95131E+00	1706.00000	.02912	.74853

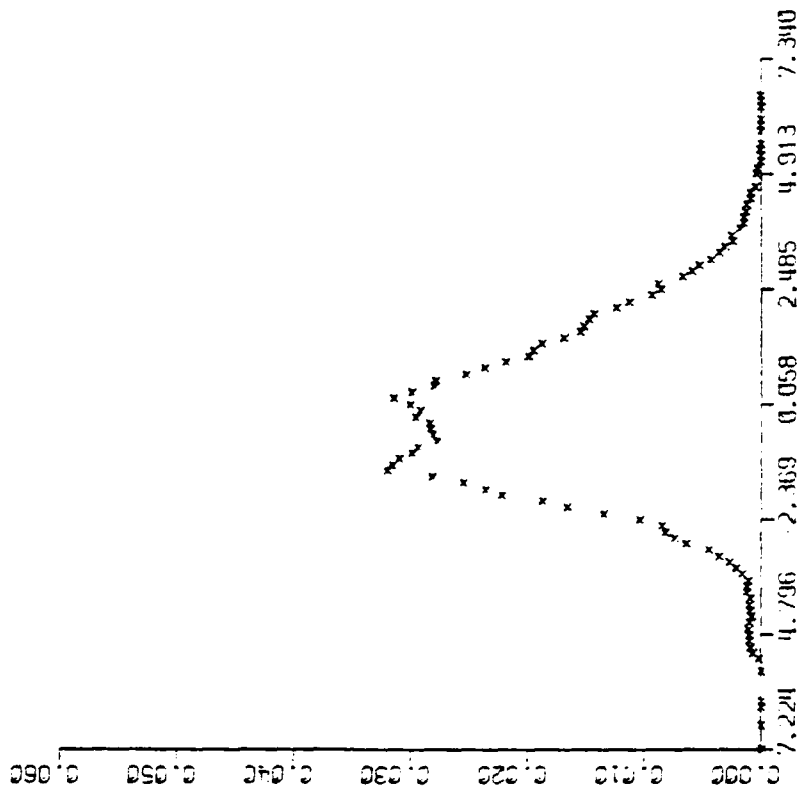


TABLE 3-12. COMPOSITE DISTRIBUTION OF CROSS-CORRELATION SURFACE OF
TARGET MASK AND BACKGROUND (Sheet 12 of 20)

INDEX	COEF	MEAN	P-404	CLIM PRODH
26	.95211E+01	1654.00000	.02201	.76554
27	.10401E+01	1504.00000	.02002	.74556
28	.12078E+01	1476.00000	.01964	.40520
29	.13156E+01	1423.00000	.01494	.42414
30	.14613E+01	1277.00000	.01639	.44114
31	.15911E+01	1172.00000	.01560	.45671
32	.17188E+01	1149.00000	.01529	.47203
33	.18466E+01	1110.00000	.01477	.48680
34	.19743E+01	1041.00000	.01439	.50114
35	.21021E+01	942.00000	.01254	.51372
36	.22298E+01	855.00000	.01138	.52510
37	.23576E+01	716.00000	.00953	.53463
38	.24853E+01	651.00000	.00866	.54329
39	.26131E+01	671.00000	.00893	.55222
40	.27408E+01	504.00000	.00676	.55894
41	.28686E+01	450.00000	.00599	.56497
42	.29963E+01	406.00000	.00540	.57038
43	.31241E+01	331.00000	.00441	.57478
44	.32518E+01	279.00000	.00371	.57849
45	.33795E+01	241.00000	.00321	.58170
46	.35073E+01	187.00000	.00249	.58419
47	.36350E+01	194.00000	.00264	.58682
48	.37628E+01	143.00000	.00190	.58873
49	.38905E+01	119.00000	.00158	.59031
50	.40183E+01	114.00000	.00157	.59188
1	.41460E+01	102.00000	.00136	.59324
2	.42738E+01	101.00000	.00134	.59454
3	.44015E+01	73.00000	.00097	.59555
4	.45293E+01	75.00000	.00100	.59655
5	.46570E+01	47.00000	.00063	.59718
6	.47848E+01	46.00000	.00063	.59779
7	.49125E+01	36.00000	.00051	.59830
8	.50403E+01	29.00000	.00039	.59868
9	.51680E+01	10.00000	.00013	.59882
10	.52958E+01	4.00000	.00011	.59892
11	.54235E+01	14.00000	.00019	.59911
12	.55513E+01	5.00000	.00007	.59917
13	.56790E+01	1.00000	.00004	.59921
14	.58068E+01	4.00000	.00012	.59933
15	.59345E+01	6.00000	.00008	.59941
16	.60623E+01	5.00000	.00007	.59948
17	.61900E+01	4.00000	.00012	.59960
18	.63178E+01	11.00000	.00015	.59975
19	.64455E+01	10.00000	.00013	.59988
20	.65733E+01	6.00000	.00008	.59996
21	.67010E+01	3.00000	.00004	.60000
COMPOSITE MEAN AND STANDARD DEVIATION				.16142211E+01

TABLE 3-12. COMPOSITE DISTRIBUTION OF CROSS-CORRELATION SURFACE OF
TARGET MASK AND BACKGROUND (Sheet 13 of 20)

TABLE 3-12. COMPOSITE DISTRIBUTION OF CROSS-CORRELATION SURFACE OF
TARGET MASK AND BACKGROUND (Sheet 13 of 20)

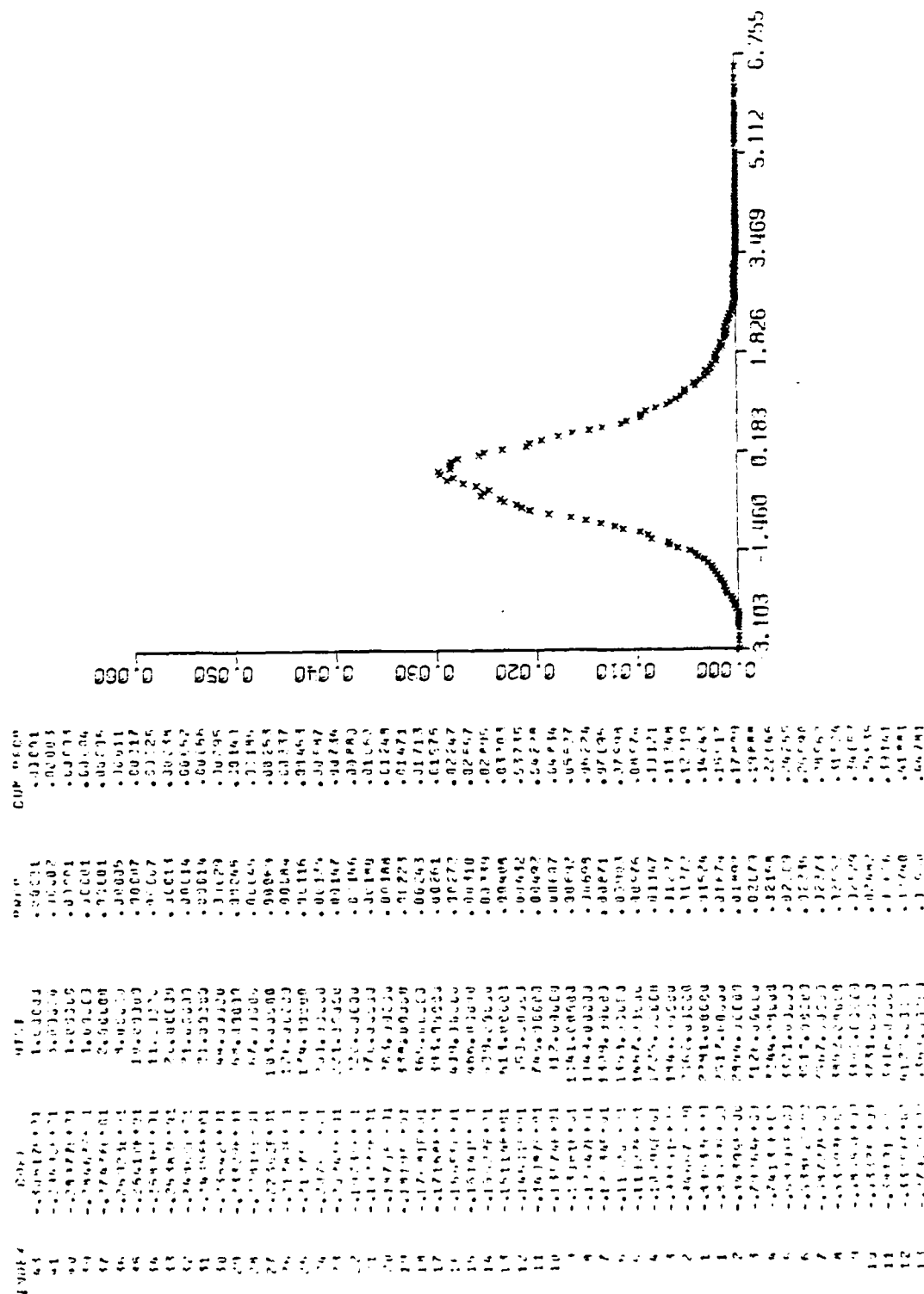


TABLE 3-12.

Year	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422
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TABLE 3-12. COMPOSITE DISTRIBUTION OF CROSS-CORRELATION SURFACE OF TARGET MASK AND BACKGROUND (Sheet 15 of 20)

Year	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422
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TABLE 3-12. COMPOSITE DISTRIBUTION OF CROSS-CORRELATION SURFACE OF
TARGET MASK AND BACKGROUND (Sheet 16 of 20)

Line #	Value	Mean	Std. Dev.	Corr. Coef.
45	0.00000000	0.0000	0.0000	0.0000
46	0.00000000	0.0000	0.0000	0.0000
47	0.00000000	0.0000	0.0000	0.0000
48	0.00000000	0.0000	0.0000	0.0000
49	0.00000000	0.0000	0.0000	0.0000
50	0.00000000	0.0000	0.0000	0.0000
51	0.00000000	0.0000	0.0000	0.0000
52	0.00000000	0.0000	0.0000	0.0000
53	0.00000000	0.0000	0.0000	0.0000
54	0.00000000	0.0000	0.0000	0.0000
55	0.00000000	0.0000	0.0000	0.0000
56	0.00000000	0.0000	0.0000	0.0000
57	0.00000000	0.0000	0.0000	0.0000
58	0.00000000	0.0000	0.0000	0.0000
59	0.00000000	0.0000	0.0000	0.0000
60	0.00000000	0.0000	0.0000	0.0000
61	0.00000000	0.0000	0.0000	0.0000
62	0.00000000	0.0000	0.0000	0.0000
63	0.00000000	0.0000	0.0000	0.0000
64	0.00000000	0.0000	0.0000	0.0000
65	0.00000000	0.0000	0.0000	0.0000
66	0.00000000	0.0000	0.0000	0.0000
67	0.00000000	0.0000	0.0000	0.0000
68	0.00000000	0.0000	0.0000	0.0000
69	0.00000000	0.0000	0.0000	0.0000
70	0.00000000	0.0000	0.0000	0.0000
71	0.00000000	0.0000	0.0000	0.0000
72	0.00000000	0.0000	0.0000	0.0000
73	0.00000000	0.0000	0.0000	0.0000
74	0.00000000	0.0000	0.0000	0.0000
75	0.00000000	0.0000	0.0000	0.0000
76	0.00000000	0.0000	0.0000	0.0000
77	0.00000000	0.0000	0.0000	0.0000
78	0.00000000	0.0000	0.0000	0.0000
79	0.00000000	0.0000	0.0000	0.0000
80	0.00000000	0.0000	0.0000	0.0000
81	0.00000000	0.0000	0.0000	0.0000
82	0.00000000	0.0000	0.0000	0.0000
83	0.00000000	0.0000	0.0000	0.0000
84	0.00000000	0.0000	0.0000	0.0000
85	0.00000000	0.0000	0.0000	0.0000
86	0.00000000	0.0000	0.0000	0.0000
87	0.00000000	0.0000	0.0000	0.0000
88	0.00000000	0.0000	0.0000	0.0000
89	0.00000000	0.0000	0.0000	0.0000
90	0.00000000	0.0000	0.0000	0.0000
91	0.00000000	0.0000	0.0000	0.0000
92	0.00000000	0.0000	0.0000	0.0000
93	0.00000000	0.0000	0.0000	0.0000
94	0.00000000	0.0000	0.0000	0.0000
95	0.00000000	0.0000	0.0000	0.0000
96	0.00000000	0.0000	0.0000	0.0000
97	0.00000000	0.0000	0.0000	0.0000
98	0.00000000	0.0000	0.0000	0.0000
99	0.00000000	0.0000	0.0000	0.0000
100	0.00000000	0.0000	0.0000	0.0000

0.01702941E+00

TABLE 3-12. COMPOSITE DISTRIBUTION OF CROSS-CORRELATION SURFACE OF
TARGET MASK AND BACKGROUND (Sheet 17 of 20)

COMPOSITE OF 10 FILES
LAWY CORRELATION
LAWY TARGET 1 MASK 12 0 34.068
LAWY 4 ADU 77 1-5 WU ASPHALT HADDS

INDEX	REF	REST	PRCH	CUM FROM
1	-67094E+01	5.000000	.00011	.00011
2	-64968E+01	38.000000	.00006	.00017
3	-62841E+01	42.000000	.00005	.00022
4	-60716E+01	28.000000	.00061	.00083
5	-58590E+01	26.000000	.00054	.00137
6	-56461E+01	47.000000	.00106	.00243
7	-54335E+01	91.000000	.00205	.00448
8	-52208E+01	106.000000	.00239	.00687
9	-50081E+01	145.000000	.00427	.01114
10	-47955E+01	636.000000	.01445	.02559
11	-45828E+01	717.000000	.01622	.04181
12	-43702E+01	674.000000	.01520	.05701
13	-41575E+01	697.000000	.01572	.07273
14	-39448E+01	678.000000	.01529	.08802
15	-37321E+01	933.000000	.02105	.10907
16	-35194E+01	774.000000	.01757	.12664
17	-33067E+01	730.000000	.01647	.14311
18	-30940E+01	742.000000	.01690	.15999
19	-28813E+01	821.000000	.01852	.17851
20	-26686E+01	1081.000000	.02439	.20290
21	-24559E+01	1060.000000	.02391	.22681
22	-22432E+01	1095.000000	.02470	.25151
23	-20305E+01	1188.000000	.02680	.27831
24	-18178E+01	1135.000000	.02515	.30346
25	-16051E+01	993.000000	.02240	.32586
26	-13924E+01	1125.000000	.02538	.35124
27	-11797E+01	1269.000000	.02863	.37987
28	-9670E+01	1211.000000	.02777	.40764
29	-7543E+01	1115.000000	.02466	.43230
30	-5416E+01	1280.000000	.02887	.46117
31	-3289E+01	1316.000000	.02769	.48886
32	-1162E+01	1256.000000	.02433	.51319
33	965E+01	1169.000000	.02637	.53956
34	2862E+01	1299.000000	.02710	.56666
35	3045E+01	1110.000000	.02955	.59621
36	5211E+01	1121.000000	.02984	.62605
37	7386E+01	1096.000000	.02355	.64960
38	9561E+01	847.000000	.01711	.66671
39	11592E+01	830.000000	.01812	.68483
40	13713E+01	702.000000	.01599	.70082
41	15834E+01	714.000000	.01611	.71693
42	17955E+01	692.000000	.01561	.73254
43	20076E+01	688.000000	.01562	.74816
44	22197E+01	614.000000	.01410	.76226
45	24318E+01	536.000000	.01209	.77435
46	26439E+01	466.000000	.01067	.78502
47	28560E+01	443.000000	.00999	.79501
48	30681E+01	416.000000	.00979	.80480
49	32802E+01	416.000000	.00986	.81466
50	34923E+01	466.000000	.01002	.82468
51	37044E+01	466.000000	.01047	.83515
52	39165E+01	507.000000	.01164	.84679
53	41286E+01	501.000000	.01146	.85825
54	43407E+01	740.000000	.01214	.87039

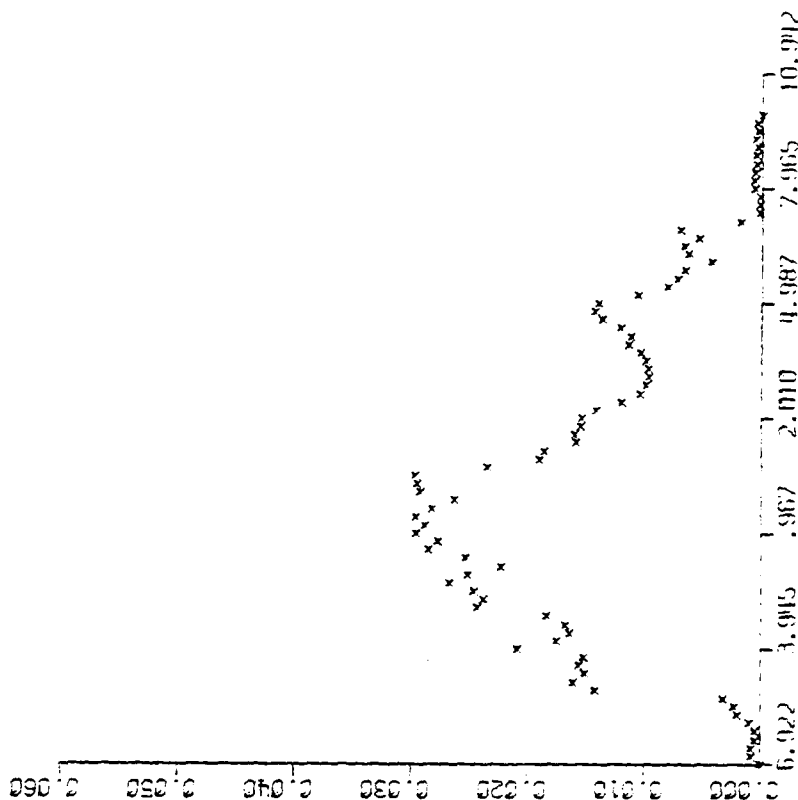


TABLE 3-12. COMPOSITE DISTRIBUTION OF CROSS-CORRELATION SURFACE OF
TARGET MASK AND BACKGROUND (Sheet 18 of 20)

LINE	CORR	LIST	P-VAL	CUM. PROB
1	.000000	.000000	.0000	.0000
2	.000000	.000000	.0000	.0000
3	.000000	.000000	.0000	.0000
4	.000000	.000000	.0000	.0000
5	.000000	.000000	.0000	.0000
6	.000000	.000000	.0000	.0000
7	.000000	.000000	.0000	.0000
8	.000000	.000000	.0000	.0000
9	.000000	.000000	.0000	.0000
10	.000000	.000000	.0000	.0000
11	.000000	.000000	.0000	.0000
12	.000000	.000000	.0000	.0000
13	.000000	.000000	.0000	.0000
14	.000000	.000000	.0000	.0000
15	.000000	.000000	.0000	.0000
16	.000000	.000000	.0000	.0000
17	.000000	.000000	.0000	.0000
18	.000000	.000000	.0000	.0000
19	.000000	.000000	.0000	.0000
20	.000000	.000000	.0000	.0000
21	.000000	.000000	.0000	.0000
COMPOSITE MEAN AND STANDARD DEVIATION				.000000
				.000000

TABLE 3-12. COMPOSITE DISTRIBUTION OF CROSS-CORRELATION SURFACE OF TARGET MASK AND BACKGROUND (Sheet 19 of 20)

COMPOSITE OF 5 FILES
CROSS CORRELATION
FAMS JUNE 17 MASK 11 47 23.9
FAMS 4 AUG 77 1-5 40 BUILDINGS

Factor	COEF	HLST	PROB	CLIM PROB
1	-0.77191E+01	24.00000	0.01104	0.01010
2	-0.11111E+01	23.00000	0.01104	0.00211
3	-0.74473E+01	30.00000	0.01172	0.03366
4	-0.74473E+01	36.00000	0.00436	0.00021
5	-0.71622E+01	111.00000	0.01325	0.01325
6	-0.61666E+01	111.00000	0.00504	0.01429
7	-0.65910E+01	142.00000	0.00476	0.02659
8	-0.63354E+01	143.00000	0.00430	0.03445
9	-0.60139E+01	249.00000	0.01130	0.06115
10	-0.57342E+01	271.00000	0.01130	0.05865
11	-0.54866E+01	313.00000	0.01420	0.07266
12	-0.51630E+01	332.00000	0.01179	0.09045
13	-0.48176E+01	404.00000	0.02215	0.11259
14	-0.51317E+01	589.00000	0.02673	0.13932
15	-0.36631E+01	750.00000	0.03494	0.17336
16	-0.02705E+01	749.00000	0.03399	0.20735
17	-0.17349E+01	079.00000	0.03989	0.24124
18	-0.16493E+01	917.00000	0.04162	0.28866
19	-0.31371E+01	929.00000	0.02416	0.31102
20	-0.24781E+01	081.00000	0.03091	0.36192
21	-0.25923E+01	298.00000	0.02114	0.38006
22	-0.27068E+01	497.00000	0.02256	0.41162
23	-0.20212E+01	531.00000	0.02410	0.43572
24	-0.14566E+01	293.00000	0.02664	0.46036
25	-0.14008E+01	718.00000	0.02623	0.48659
26	-0.21948E+01	264.00000	0.01198	0.55368
27	-0.34298E+01	262.00000	0.02097	0.50756
28	-0.34298E+01	477.00000	0.01711	0.52661
29	-0.59317E+01	325.00000	0.04475	0.53941
30	-0.30766E+01	110.00000	0.01407	0.55368
31	-0.21948E+01	462.00000	0.02097	0.50756
32	-0.34298E+01	262.00000	0.01198	0.55368
33	-0.34298E+01	262.00000	0.01198	0.55368
34	-0.34298E+01	262.00000	0.01198	0.55368
35	-0.34298E+01	262.00000	0.01198	0.55368
36	-0.34298E+01	262.00000	0.01198	0.55368
37	-0.34298E+01	262.00000	0.01198	0.55368
38	-0.34298E+01	262.00000	0.01198	0.55368
39	-0.34298E+01	262.00000	0.01198	0.55368
40	-0.34298E+01	262.00000	0.01198	0.55368
41	-0.34298E+01	262.00000	0.01198	0.55368
42	-0.34298E+01	262.00000	0.01198	0.55368
43	-0.34298E+01	262.00000	0.01198	0.55368
44	-0.34298E+01	262.00000	0.01198	0.55368
45	-0.34298E+01	262.00000	0.01198	0.55368
46	-0.34298E+01	262.00000	0.01198	0.55368
47	-0.34298E+01	262.00000	0.01198	0.55368
48	-0.34298E+01	262.00000	0.01198	0.55368
49	-0.34298E+01	262.00000	0.01198	0.55368
50	-0.34298E+01	262.00000	0.01198	0.55368

TABLE 3-12. COMPOSITE DISTRIBUTION OF CROSS-CORRELATION SURFACE OF
TARGET MASK AND BACKGROUND (Sheet 20 of 20)

Line #	COEF	RES	PROB	CUM PROB
1	.71194E+01	87.00000	.00195	.97014
2	.74040E+01	68.00000	.00103	.97122
3	.76896E+01	64.00000	.00230	.97614
4	.79752E+01	112.00000	.00508	.98121
5	.82608E+01	143.00000	.00669	.98770
6	.85464E+01	107.00000	.00495	.99265
7	.88320E+01	81.00000	.00368	.99632
8	.91176E+01	43.00000	.00195	.99828
9	.94032E+01	2.00000	.00009	.99817
10	.96888E+01	6.00000	.00027	.99864
11	.99744E+01	4.00000	.00014	.99882
12	1.02600E+01	4.00000	.00018	.99900
13	1.05456E+01	8.00000	.00036	.99916
14	1.08312E+01	12.00000	.00054	.99991
15	1.11168E+01	2.00000	.00009	1.00000
16	1.14024E+01	2.00000	.00009	1.00000
COMPOSITE MEAN AND STANDARD DEVIATION				-.10331734E-01
				.42255114E+01

TABLE 3-13. NORMALIZED CROSS-CORRELATION

COMPOSITE OF 17 FILES
NORMALIZED CROSS CORRELATION
FAMS TARGET 1 11 47 21.9
FAMS 0 AUG 77 1-5 MB GRASS

INDEX	COEF	HIST	PROB	CUM PROB
5	-.54728F+00	2.00000	.00001	.00001
6	-.52727E+00	2.00000	.00003	.00005
7	-.50726E+00	2.00000	.00008	.00013
8	-.48726E+00	4.00000	.00016	.00029
9	-.46725E+00	12.00000	.00027	.00056
10	-.44724E+00	20.00000	.00040	.00096
11	-.42724E+00	30.00000	.00075	.00171
12	-.40723E+00	56.00000	.00118	.00289
13	-.38722E+00	89.00000	.00222	.00511
14	-.36722E+00	167.00000	.00341	.00852
15	-.34721E+00	256.00000	.00515	.01367
16	-.32720E+00	387.00000	.00757	.02124
17	-.30720E+00	569.00000	.00926	.03050
18	-.28719E+00	646.00000	.01262	.04312
19	-.26718E+00	948.00000	.01568	.05880
20	-.24718E+00	1178.00000	.02008	.07888
21	-.22717E+00	1509.00000	.02415	.10303
22	-.20717E+00	1815.00000	.02885	.13188
23	-.18716E+00	2168.00000	.03621	.16809
24	-.16715E+00	2721.00000	.03898	.20707
25	-.14715E+00	3229.00000	.04554	.25261
26	-.12714E+00	3422.00000	.05274	.30535
27	-.10713E+00	3963.00000	.05291	.35826
28	-.87126E-01	4727.00000	.05298	.41124
29	-.67119E-01	4732.00000	.05095	.46219
30	-.47112E-01	4580.00000	.06042	.52261
31	-.27106E-01	4540.00000	.05598	.57859
32	-.10992E-02	4206.00000	.05373	.63232
33	.12907E-01	4037.00000	.04804	.68036
34	.32914E-01	3610.00000	.04177	.72213
35	.52921E-01	3289.00000	.04063	.76276
36	.72927E-01	3053.00000	.03476	.79752
37	.92934E-01	2612.00000	.03077	.82829
38	.11294E+00	2317.00000	.02618	.85447
39	.13295E+00	1967.00000	.02320	.87767
40	.15295E+00	1743.00000	.01802	.89569
41	.17296E+00	1354.00000	.01577	.91146
42	.19297E+00	1185.00000	.01311	.92457
43	.21297E+00	985.00000	.01046	.93503
44	.23298E+00	816.00000	.00818	.94321
45	.25299E+00	615.00000	.00675	.94996
46	.27299E+00	470.00000	.00446	.95442
47	.29300E+00	365.00000	.00369	.95811
48	.31301E+00	277.00000	.00249	.96060
49	.33301E+00	187.00000	.00145	.96205
50	.35302E+00	139.00000	.00141	.96346
51	.37303E+00	106.00000	.00110	.96456
52	.39304E+00	81.00000	.00048	.96504
53	.41305E+00	51.00000	.00028	.96532
54	.43305E+00	21.00000	.00027	.96559
55	.45306E+00	13.00000	.00017	.96576

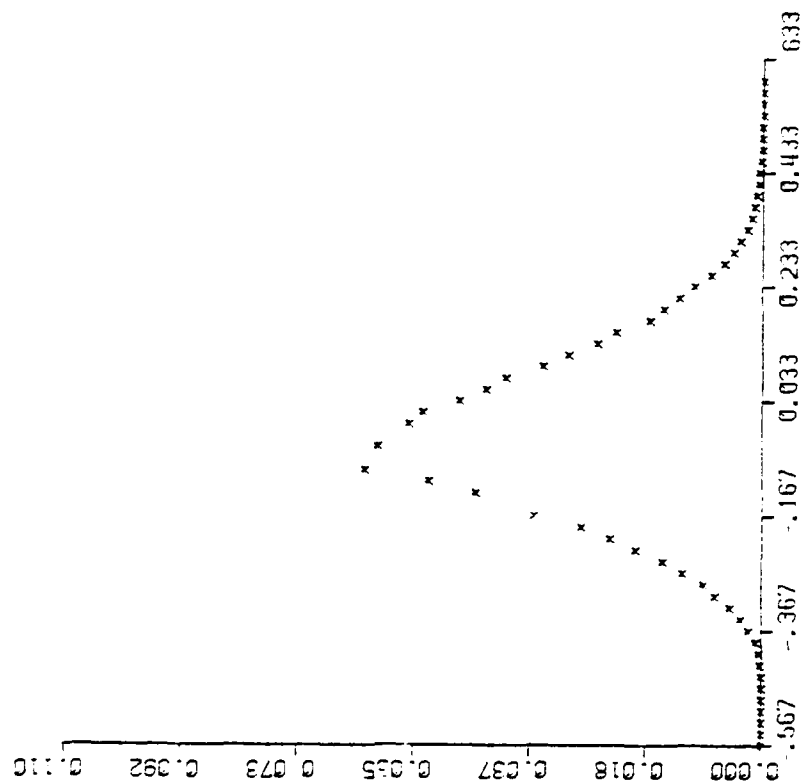


TABLE 3-13. NORMALIZED CROSS-CORRELATION (Sheet 2 of 16)

INDEX	COEF	MEAN	PROB	CUM PROB
50	.41307E+00	1.00000	.00017	.99983
1	.51308E+00	4.00000	.00005	.99995
2	.55109E+00	3.00000	.00004	.99997
3	.57109E+00	1.00000	.00001	.99999
4	.59110E+00	1.00000	.00001	1.00000
COMPOSITE MEAN AND STANDARD DEVIATION				
			-.2736754E-01	.13849937E+00

TABLE 3-13. NORMALIZED CROSS-CORRELATION (Sheet 3 of 16)

COMPOSITE OF 16 FILLS
NORMALIZED CROSS CORRELATION
FAVS TARGET 1 11 97 21.9
FAVS H AUG 17 3-5 WD TREES

INDEX	COEF	HIST	PROB	CUM PROB
1	-.4712E+00	1.00000	.00001	.00001
2	-.4717E+00	3.00000	.00002	.00003
3	-.5566E+00	5.00000	.00003	.00006
4	-.4410E+00	11.00000	.00007	.00013
5	-.4256E+00	18.00000	.00012	.00025
6	-.4103E+00	44.00000	.00032	.00057
7	-.3969E+00	57.00000	.00038	.00095
8	-.3796E+00	94.00000	.00065	.00160
9	-.3625E+00	132.00000	.00092	.00253
10	-.3462E+00	196.00000	.00130	.00383
11	-.3308E+00	299.00000	.00199	.00582
12	-.3153E+00	432.00000	.00261	.00843
13	-.3011E+00	629.00000	.00452	.01195
14	-.2874E+00	895.00000	.00662	.01657
15	-.2748E+00	1173.00000	.00594	.02251
16	-.2621E+00	1667.00000	.00780	.03031
17	-.2507E+00	2198.00000	.00976	.04007
18	-.2413E+00	2989.00000	.01194	.05205
19	-.2326E+00	4089.00000	.01462	.06667
20	-.2246E+00	5583.00000	.01704	.08371
21	-.2175E+00	7662.00000	.02040	.10411
22	-.2119E+00	1033.00000	.02530	.12941
23	-.2065E+00	1413.00000	.02762	.15703
24	-.2013E+00	1909.00000	.03252	.18955
25	-.1963E+00	2583.00000	.03711	.22669
26	-.1915E+00	3634.00000	.04013	.26682
27	-.1874E+00	4926.00000	.04274	.30956
28	-.1837E+00	6811.00000	.04510	.35486
29	-.1803E+00	9361.00000	.04693	.40180
30	-.1771E+00	12877.00000	.04896	.45076
31	-.1740E+00	17577.00000	.04954	.49929
32	-.1710E+00	23866.00000	.04846	.54775
33	-.1681E+00	32222.00000	.04671	.59446
34	-.1654E+00	43372.00000	.04332	.63838
35	-.1628E+00	57837.00000	.04115	.67953
36	-.1604E+00	7644.00000	.03821	.71774
37	-.1581E+00	10346.00000	.03556	.75329
38	-.1559E+00	14077.00000	.03151	.78440
39	-.1538E+00	18877.00000	.02918	.81398
40	-.1518E+00	25877.00000	.02537	.83935
41	-.1499E+00	34677.00000	.02240	.86174
42	-.1481E+00	46077.00000	.01934	.88108
43	-.1464E+00	60877.00000	.01694	.89802
44	-.1448E+00	80877.00000	.01482	.91284
45	-.1433E+00	107877.00000	.01304	.92628
46	-.1418E+00	143877.00000	.01105	.93732
47	-.1404E+00	190877.00000	.01010	.94743
48	-.1391E+00	253877.00000	.00918	.95561
49	-.1379E+00	338877.00000	.00702	.96263
50	-.1367E+00	453877.00000	.00591	.96855
51	-.1356E+00	603877.00000	.00518	.97373
52	-.1345E+00	803877.00000	.00462	.97805
53	-.1335E+00	1063877.00000	.00414	.98174
54	-.1325E+00	1403877.00000	.00368	.98511

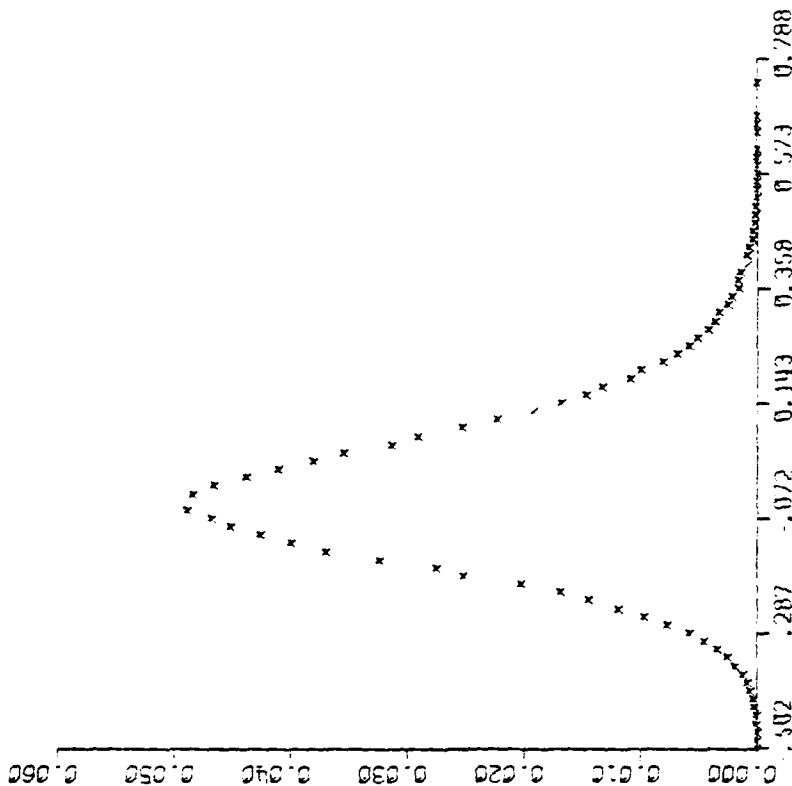


TABLE 3-13. NORMALIZED CROSS-CORRELATION (Sheet 4 of 16)

INDEX	COEF	MEAN	STANDARD DEVIATION	COMPOSITE MEAN AND STANDARD DEVIATION	CUM CORR
46	.32689E+00	189.00000	.00259	.00770	.99004
47	.34225E+00	151.00000	.00213	.00168	.99340
48	.35761E+00	252.00000	.00168	.00153	.99586
49	.37296E+00	253.00000	.00153	.00101	.99687
50	.38832E+00	230.00000	.00093	.00078	.99765
1	.40368E+00	140.00000	.00078	.00053	.99817
2	.41904E+00	152.00000	.00049	.00049	.99866
3	.43440E+00	117.00000	.00026	.00026	.99892
4	.44976E+00	72.00000	.00025	.00025	.99918
5	.46512E+00	74.00000	.00023	.00023	.99941
6	.48048E+00	39.00000	.00013	.00013	.99953
7	.49584E+00	38.00000	.00009	.00009	.99963
8	.51120E+00	35.00000	.00008	.00008	.99971
9	.52656E+00	19.00000	.00005	.00005	.99975
10	.54192E+00	12.00000	.00003	.00003	.99979
11	.55728E+00	12.00000	.00010	.00010	.99989
12	.57264E+00	7.00000	.00005	.00005	.99993
13	.58800E+00	5.00000	.00004	.00004	.99997
14	.60336E+00	15.00000	.00001	.00001	.99999
15	.61872E+00	7.00000	.00001	.00001	.99999
16	.63408E+00	6.00000	.00001	.00001	.99999
17	.64944E+00	2.00000	.00001	.00001	.99999
18	.66480E+00	1.00000	.00001	.00001	.99999
19	.68016E+00	1.00000	.00001	.00001	.99999
20	.69552E+00	1.00000	.00001	.00001	.99999
21	.71088E+00	1.00000	.00001	.00001	.99999
22	.72624E+00	1.00000	.00001	.00001	.99999
23	.74160E+00	1.00000	.00001	.00001	.99999
COMPOSITE MEAN AND STANDARD DEVIATION					.13722639E+00

TABLE 3-13. NORMALIZED CROSS-CORRELATION (Sheet 5 of 16)

[illegible]

TABLE 3-13. NORMALIZED CROSS-CORRELATION (Sheet 7 of 16)

COMPOSITE OF 5 FILLS
NORMALIZED CROSS-CORRELATION
FAMS (AUG 11 - 11 57 23.9)
FAMS (AUG 11 11 57 23.9)

DEPTH	COLE	WST	WST	WST
6	-0.0210 +0.00	1.00000	0.00005	0.00005
7	-0.0417 +0.00	2.00000	0.00016	0.00016
8	-0.0625 +0.00	4.00000	0.00050	0.00050
9	-0.1197 +0.00	11.00000	0.00100	0.00100
10	-0.1347 +0.00	19.00000	0.00186	0.00186
11	-0.1493 +0.00	40.00000	0.00168	0.00168
12	-0.1757 +0.00	75.00000	0.00708	0.00708
13	-0.1517 +0.00	115.00000	0.01210	0.01210
14	-0.1457 +0.00	146.00000	0.01856	0.01856
15	-0.1497 +0.00	168.00000	0.02619	0.02619
16	-0.1463 +0.00	175.00000	0.03411	0.03411
17	-0.1487 +0.00	211.00000	0.04379	0.04379
18	-0.1417 +0.00	232.00000	0.05412	0.05412
19	-0.1357 +0.00	277.00000	0.06883	0.06883
20	-0.1397 +0.00	289.00000	0.08001	0.08001
21	-0.1437 +0.00	298.00000	0.09353	0.09353
22	-0.1407 +0.00	301.00000	0.11042	0.11042
23	-0.1417 +0.00	305.00000	0.13174	0.13174
24	-0.1357 +0.00	359.00000	0.16365	0.16365
25	-0.1397 +0.00	408.00000	0.20012	0.20012
26	-0.1307 +0.00	1069.00000	0.26883	0.26883
27	-0.1277 +0.00	1417.00000	0.31114	0.31114
28	-0.1217 +0.00	1462.00000	0.37406	0.37406
29	-0.1257 +0.00	1206.00000	0.42477	0.42477
30	-0.1297 +0.00	905.00000	0.46944	0.46944
31	-0.1377 +0.00	777.00000	0.50511	0.50511
32	-0.1477 +0.00	634.00000	0.53188	0.53188
33	-0.1577 +0.00	521.00000	0.55779	0.55779
34	-0.1677 +0.00	576.00000	0.58401	0.58401
35	-0.1777 +0.00	670.00000	0.61443	0.61443
36	-0.1877 +0.00	1017.00000	0.66059	0.66059
37	-0.1977 +0.00	1227.00000	0.71627	0.71627
38	-0.2077 +0.00	971.00000	0.76061	0.76061
39	-0.2177 +0.00	712.00000	0.79274	0.79274
40	-0.2277 +0.00	589.00000	0.81039	0.81039
41	-0.2377 +0.00	375.00000	0.82741	0.82741
42	-0.2477 +0.00	356.00000	0.84364	0.84364
43	-0.2577 +0.00	287.00000	0.85650	0.85650
44	-0.2677 +0.00	281.00000	0.86725	0.86725
45	-0.2777 +0.00	290.00000	0.87778	0.87778
46	-0.2877 +0.00	262.00000	0.88754	0.88754
47	-0.2977 +0.00	265.00000	0.89691	0.89691
48	-0.3077 +0.00	233.00000	0.90512	0.90512
49	-0.3177 +0.00	192.00000	0.91215	0.91215
50	-0.3277 +0.00	172.00000	0.91818	0.91818
51	-0.3377 +0.00	162.00000	0.92316	0.92316
52	-0.3477 +0.00	200.00000	0.92718	0.92718
53	-0.3577 +0.00	192.00000	0.93165	0.93165
54	-0.3677 +0.00	171.00000	0.93554	0.93554
55	-0.3777 +0.00	155.00000	0.93891	0.93891
56	-0.3877 +0.00	155.00000	0.94274	0.94274
57	-0.3977 +0.00	125.00000	0.94591	0.94591
58	-0.4077 +0.00	112.00000	0.94857	0.94857
59	-0.4177 +0.00	67.00000	0.95072	0.95072
60	-0.4277 +0.00	67.00000	0.95201	0.95201
61	-0.4377 +0.00	67.00000	0.95305	0.95305

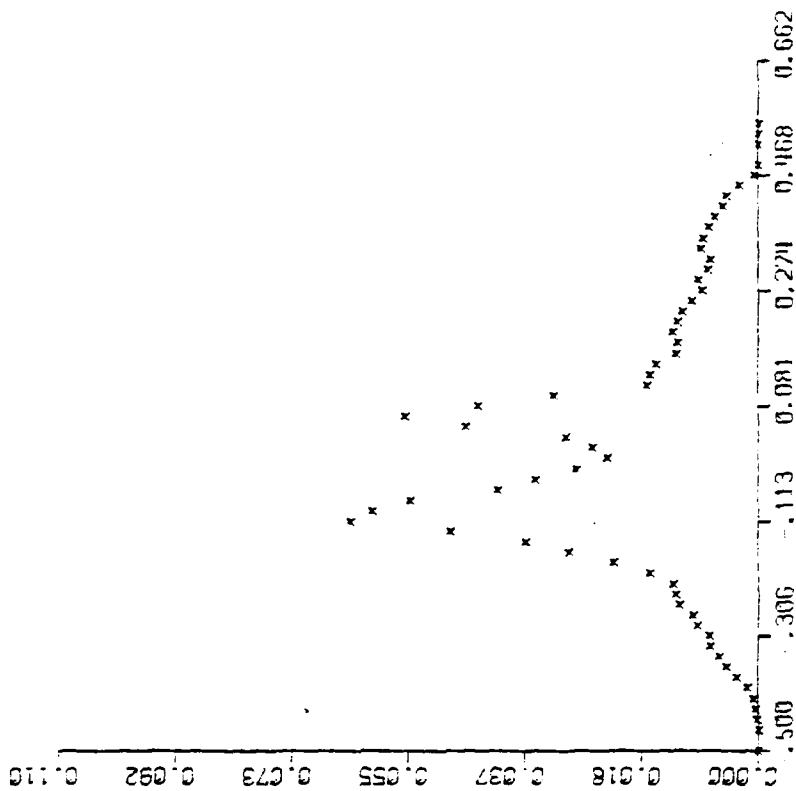


TABLE 3-13. NORMALIZED CROSS-CORRELATION (Sheet 8 of 16)

INDEX	COEF	HIST	P-VAL	CUM P-VAL
10	0.50000000	10.000000	.00073	.99927
1	0.50000000	2.000000	.00009	.99991
2	0.50000000	1.000000	.00005	.99995
3	0.50000000	1.000000	.00005	1.00000
COMPOSITE MEAN AND STANDARD DEVIATION				
			-.00000	.17073010E+00

TABLE 3-13. NORMALIZED CROSS-CORRELATION (Sheet 9 of 16)

COMPOSITE OF 17 FILES
NORMALIZED CROSS CORRELATION
FAWS TARGET 7 12 0 16.068
FAWS H AUG 77 1-5 WU GRASS

INDEX	COEF	HIST	PRUH	CUM PRUH
1	-.10799E+01	69.00000	.00092	.00092
2	-.10158E+01	456.00000	.00607	.00699
3	-.99171E+00	1012.00000	.01347	.02046
4	-.96759E+00	1701.00000	.02264	.04109
5	-.90349E+00	2224.00000	.02960	.07269
6	-.85937E+00	2532.00000	.03370	.10639
7	-.81525E+00	3430.00000	.04565	.15204
8	-.77114E+00	3023.00000	.04071	.19277
9	-.77114E+00	2636.00000	.03508	.22735
10	-.72703E+00	2431.00000	.03215	.25970
11	-.68291E+00	2042.00000	.02718	.28688
12	-.63880E+00	1835.00000	.02442	.31130
13	-.59469E+00	1529.00000	.02035	.33165
14	-.55057E+00	1403.00000	.01867	.35032
15	-.50646E+00	1292.00000	.01719	.36751
16	-.46235E+00	1256.00000	.01672	.38423
17	-.41823E+00	1191.00000	.01585	.40008
18	-.37412E+00	1174.00000	.01567	.41570
19	-.33001E+00	1162.00000	.01546	.43117
20	-.28589E+00	1091.00000	.01457	.44569
21	-.24178E+00	1128.00000	.01501	.46070
22	-.19767E+00	1167.00000	.01553	.47623
23	-.15355E+00	1148.00000	.01528	.49151
24	-.10944E+00	1108.00000	.01475	.50625
25	-.65345E-01	1124.00000	.01503	.52128
26	-.21213E-01	1196.00000	.01592	.53720
27	.22901E-01	1292.00000	.01719	.55439
28	.67014E-01	1355.00000	.01803	.57242
29	.11113E+00	1343.00000	.01787	.59030
30	.15524E+00	1363.00000	.01814	.60844
31	.19935E+00	1533.00000	.02040	.62884
32	.24147E+00	1520.00000	.02073	.64907
33	.28758E+00	1657.00000	.02205	.67112
34	.33169E+00	1729.00000	.02301	.69413
35	.37581E+00	1823.00000	.02426	.71839
36	.41992E+00	2045.00000	.02722	.74561
37	.46403E+00	2036.00000	.02707	.77268
38	.50815E+00	2259.00000	.03006	.80274
39	.55226E+00	2410.00000	.03207	.83482
40	.59638E+00	2426.00000	.03226	.86707
41	.64049E+00	2155.00000	.02868	.89575
42	.68460E+00	1776.00000	.02364	.91939
43	.72872E+00	1422.00000	.01892	.93832
44	.77283E+00	938.00000	.01248	.95080
45	.81694E+00	681.00000	.00906	.95986
46	.86106E+00	762.00000	.01014	.97000
47	.90517E+00	745.00000	.00991	.97992
48	.94928E+00	166.00000	.00487	.98479
49	.99340E+00	239.50000	.00318	.98797
50	1.03751E+01	179.00000	.00218	.99035
51	1.08162E+01	237.00000	.00315	.99351
52	1.12572E+01	275.00000	.00366	.99717
53	1.16983E+01	134.00000	.00178	.99895
54	1.21394E+01	37.00000	.00069	.99964

TABLE 3-13. NORMALIZED CROSS-CORRELATION (Sheet 10 of 16)

INDEX	COEF	HIST	PROB	CUM PROB
47	.12581E+01	12.00000	.00016	.99960
48	.13022E+01	15.00000	.00020	.99980
49	.13463E+01	10.00000	.00013	.99993
50	.13904E+01	5.00000	.00007	1.00000
COMPOSITE MEAN AND STANDARD DEVIATION				-.10427129E+00 .59977871E+00

TABLE 3-13. NORMALIZED CROSS-CORRELATION (Sheet 11 of 16)

COMPOSITE OF 14 FILES
NORMALIZED CROSS CORRELATION
FAWS TARGET 7 12 U 14.06H
FAWS A AUG 77 1-5 M3 TREES

INDEX	COEF	HIST	PROB	CUM PROB
7	-.9494E+00	5.00000	.00003	.00003
8	-.9494E+00	5.00000	.00035	.00039
9	-.9111E+00	268.00000	.00178	.00217
10	-.8778E+00	601.00000	.00400	.00617
11	-.8425E+00	1064.00000	.00708	.01324
12	-.8072E+00	1561.00000	.01038	.02363
13	-.7719E+00	2140.00000	.01556	.03919
14	-.7366E+00	3174.00000	.02111	.06030
15	-.7013E+00	4554.00000	.02587	.08618
16	-.6659E+00	5028.00000	.03032	.11650
17	-.6306E+00	5111.00000	.03364	.14994
18	-.5953E+00	4914.00000	.03400	.18394
19	-.5600E+00	4513.00000	.03268	.21662
20	-.5247E+00	4269.00000	.03002	.24664
21	-.4894E+00	3988.00000	.02839	.27503
22	-.4541E+00	3659.00000	.02653	.30156
23	-.4188E+00	3337.00000	.02486	.32789
24	-.3835E+00	3084.00000	.02337	.35275
25	-.3482E+00	2863.00000	.02201	.37592
26	-.3129E+00	2693.00000	.02079	.39914
27	-.2776E+00	2571.00000	.01963	.42179
28	-.2423E+00	2468.00000	.01852	.44278
29	-.2070E+00	2371.00000	.01746	.46356
30	-.1717E+00	2284.00000	.01645	.48368
31	-.1364E+00	2203.00000	.01549	.50337
32	-.1011E+00	2128.00000	.01457	.52241
33	-.0658E+00	2058.00000	.01369	.54042
34	-.0305E+00	1993.00000	.01285	.55796
35	.0052E+00	1933.00000	.01205	.57506
36	.0299E+00	1878.00000	.01129	.59244
37	.0546E+00	1828.00000	.01057	.60907
38	.0793E+00	1783.00000	.00989	.62563
39	.1040E+00	1743.00000	.00925	.64258
40	.1287E+00	1708.00000	.00865	.65886
41	.1534E+00	1678.00000	.00809	.67483
42	.1781E+00	1653.00000	.00757	.69116
43	.2028E+00	1633.00000	.00709	.70742
44	.2275E+00	1618.00000	.00665	.72399
45	.2522E+00	1608.00000	.00625	.74081
46	.2769E+00	1603.00000	.00589	.75749
47	.3016E+00	1603.00000	.00557	.77468
48	.3263E+00	1608.00000	.00529	.79199
49	.3510E+00	1618.00000	.00505	.80911
50	.3757E+00	1633.00000	.00485	.82716
51	.4004E+00	1653.00000	.00469	.84455
52	.4251E+00	1678.00000	.00457	.86138
53	.4498E+00	1708.00000	.00449	.87853
54	.4745E+00	1743.00000	.00445	.89594
55	.4992E+00	1783.00000	.00445	.91279
56	.5239E+00	1828.00000	.00449	.92956
57	.5486E+00	1878.00000	.00457	.94679
58	.5733E+00	1933.00000	.00469	.96364
59	.5980E+00	1993.00000	.00485	.98164
60	.6227E+00	2058.00000	.00505	.99166

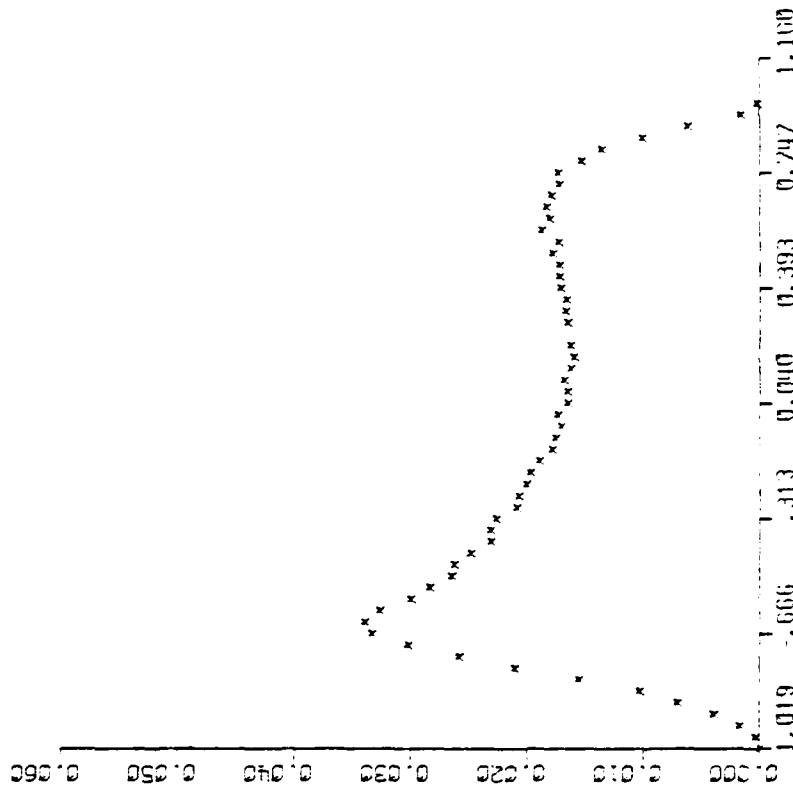
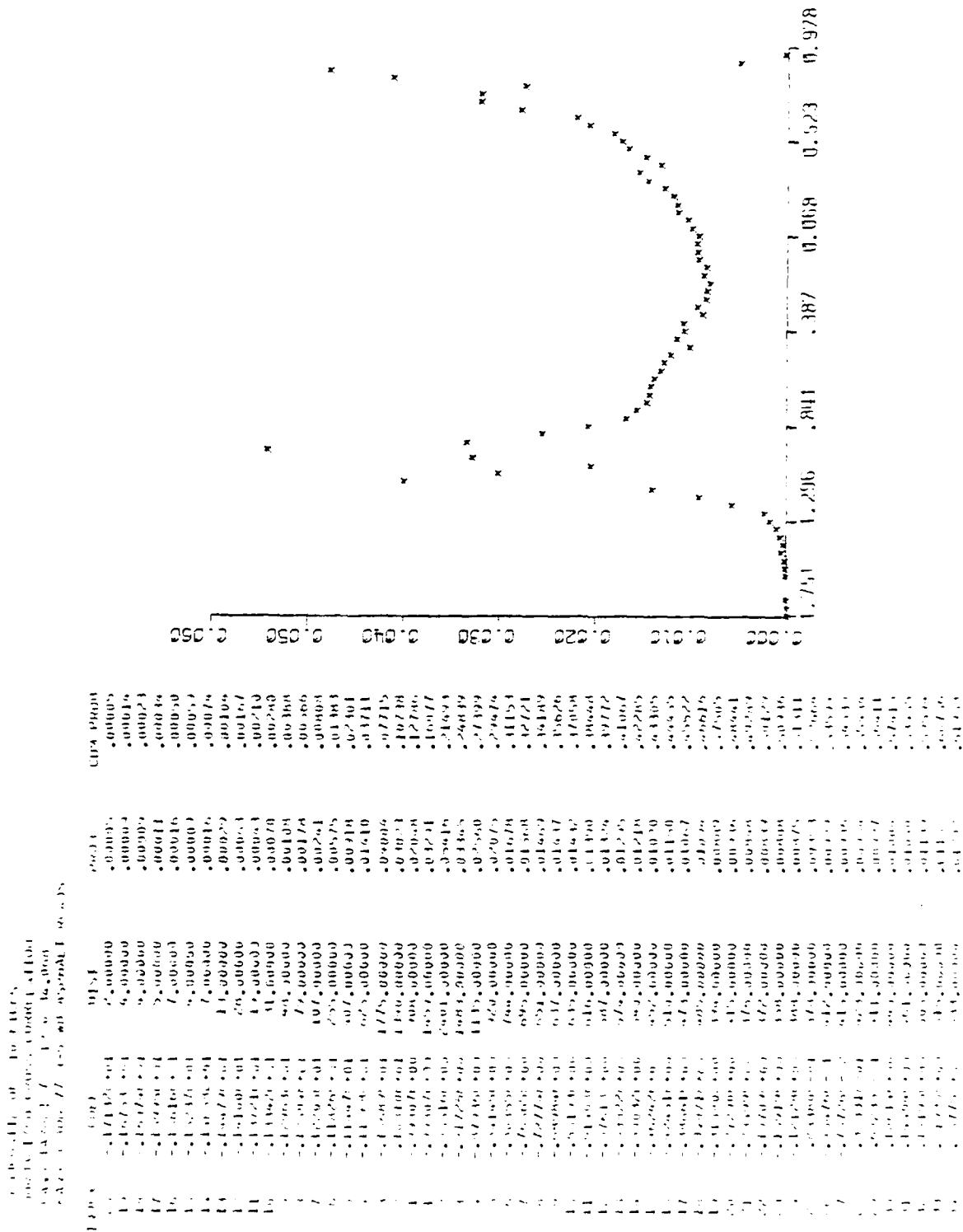


TABLE 3-13. NORMALIZED CROSS-CORRELATION (Sheet 12 of 16)

INDEX	CODE	MIN	P-10H	CUM PH0H
44	.48778F+00	942.00000	.00627	.99812
45	.42110E+00	252.00000	.00168	.99980
50	.95841E+00	30.00000	.00020	1.00000
(COMPOSITE MEAN AND STANDARD DEVIATION)				-.43704825E-01
				.50389366E+00

TABLE 3-13. NORMALIZED CROSS-CORRELATION (Sheet 13 of 16)



AD-A087 981

TELEDYNE BROWN ENGINEERING HUNTSVILLE ALA SYSTEMS DIV F/G 15/4
ORGANIZATION AND MANIPULATION OF INFRARED SCENE DATA AND INFRAR--ETC(U)
NOV 79 J RAINEY, R BURTON DAAK40-79-C-0068
SD79-MICOM-2387 NL

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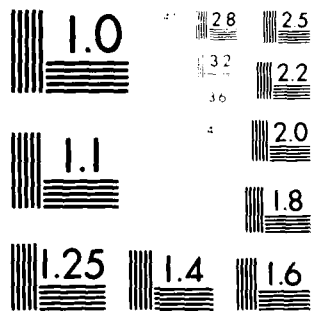
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

TABLE 3-13. NORMALIZED CROSS-CORRELATION (Sheet 15 of 16)

COMPOSITE OF 5 FILES
NORMALIZED CROSS CORRELATION
FAWS TARGET 7 11 47 23.9
FAWS 3 AUG 77 3-5 48 BUILDINGS

INDEX	COEF	HIST	PRDH	CUM PRDH
1	-.118561	4.00000	.00018	.00018
2	-.114901	21.00000	.00104	.00123
3	-.111031	65.00000	.00295	.00418
4	-.107271	170.00000	.00771	.01189
5	-.103511	654.00000	.02968	.04157
6	-.099742	1219.00000	.05512	.09669
7	-.095978	1331.00000	.06040	.15730
8	-.092214	912.00000	.04139	.19868
9	-.088450	1522.00000	.05907	.26776
10	-.084685	1474.00000	.05689	.33465
11	-.080921	824.00000	.03740	.37204
12	-.077157	589.00000	.02673	.39877
13	-.073393	347.00000	.01575	.41452
14	-.069629	292.00000	.01189	.42641
15	-.065864	221.00000	.01003	.43644
16	-.062100	207.00000	.00939	.44584
17	-.058336	186.00000	.00844	.45428
18	-.054572	168.00000	.00762	.46272
19	-.050808	140.00000	.00635	.47034
20	-.047043	143.00000	.00649	.47670
21	-.043279	135.00000	.00613	.48319
22	-.039515	143.00000	.00595	.48931
23	-.035751	144.00000	.00554	.49580
24	-.031987	138.00000	.00626	.50175
25	-.028223	122.00000	.00554	.50828
26	-.024459	136.00000	.00554	.51455
27	-.020694	136.00000	.00617	.52008
28	-.016930	136.00000	.00617	.52625
29	-.013166	154.00000	.00699	.53243
30	-.009401	124.00000	.00563	.53941
31	-.005637	137.00000	.00622	.54504
32	-.001873	163.00000	.00740	.55126
33	.001890	149.00000	.00576	.55866
34	.005648	167.00000	.00758	.56542
35	.009410	165.00000	.00749	.57300
36	.013183	172.00000	.00781	.58049
37	.016947	177.00000	.00803	.58829
38	.020712	174.00000	.00790	.59632
39	.024476	191.00000	.00867	.60422
40	.028240	183.00000	.00810	.61289
41	.031995	191.00000	.00867	.62119
42	.035750	211.00000	.01048	.62986
43	.039505	197.00000	.00844	.63829
44	.043260	216.00000	.00980	.64929
45	.047015	225.00000	.01021	.65909
46	.050770	250.00000	.01115	.66930
47	.054525	218.00000	.00949	.68064
48	.058280	260.00000	.01180	.69054
49	.062035	282.00000	.01271	.70234
50	.065790	240.00000	.01520	.71514
51	.069545	335.00000	.01520	.72784
52	.073299	394.00000	.01804	.74305
53	.077054	344.00000	.02449	.76111
54	.080809			.78580

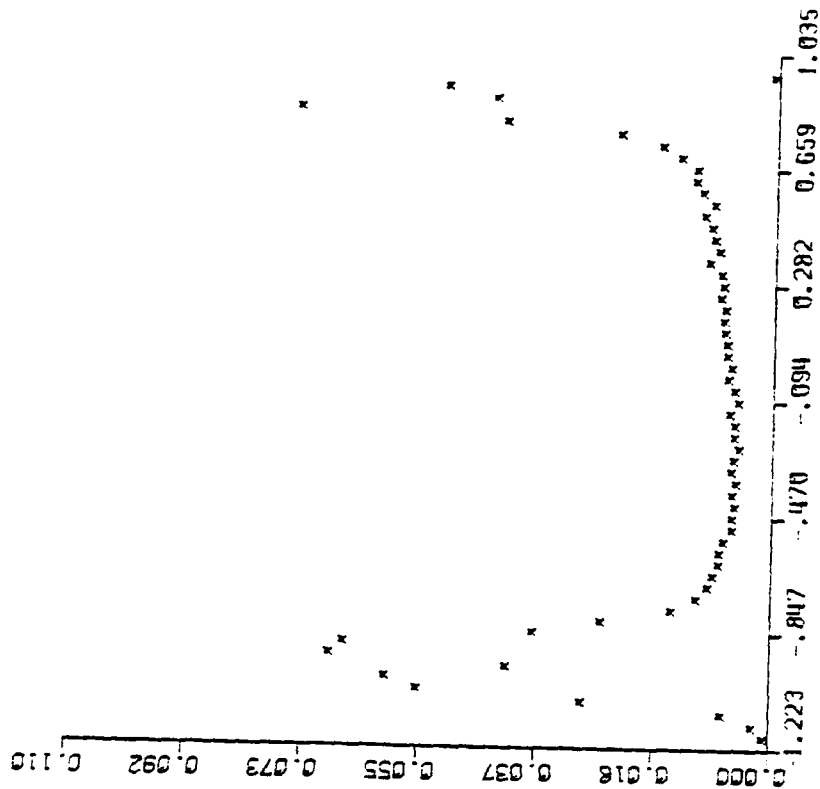


TABLE 3-13. NORMALIZED CROSS-CORRELATION (Sheet 16 of 16)

INDEX	COEF	HIST	PROB	CUM PROB
47	.80918E+00	936.00000	.04248	.82827
48	.84701E+00	1650.00000	.07488	.90315
49	.88467E+00	973.00000	.04416	.94731
50	.92231E+00	1142.00000	.05183	.99914
1	.95995E+00	19.00000	.00086	1.00000
CUMULATIVE MEAN AND STANDARD DEVIATION				.7671607E+00

TABLE 3-14. DISTRIBUTION FUNCTION OF THE CROSS-CORRELATION SURFACE OF THE 1-mrad AND 2-mrad
SENSOR FOV MASK AND THE TARGET AND BACKGROUND SCENES (Sheet 4 of 30)

INDEX	MEAN	COEF	1.8131642E-03	ST DEV	HIST	44017497E-02	2442 ZLHUS	0.00000
1	-1.0721E-01	11.00000				.00179	.00179	
2	-1.0077E-01	20.00000				.00644	.00633	
3	-.9433E-01	61.00000				.00900	.01521	
4	-.8190E-01	91.00000				.01577	.03100	
5	-.6146E-01	103.00000				.01577	.04771	
6	-.5074E-01	180.00000				.02321	.07692	
7	-.6459E-01	202.00000				.03278	.10970	
8	-.6216E-01	219.00000				.03554	.14525	
9	-.5573E-01	203.00000				.03244	.17819	
10	-.4426E-01	213.00000				.03577	.21276	
11	-.4286E-01	172.00000				.02731	.24067	
12	-.1652E-01	181.00000				.02937	.27004	
13	-.2492E-01	191.00000				.03100	.30104	
14	-.2355E-01	200.00000				.03246	.33350	
15	-.1712E-01	194.00000				.04213	.36563	
16	-.1068E-01	235.00000				.04014	.40377	
17	-.4253E-01	244.00000				.04025	.44401	
18	-.2181E-01	253.00000				.04106	.48507	
19	.06158E-01	258.00000				.04187	.52644	
20	.15050E-01	307.00000				.04398	.57676	
21	.21685E-01	304.00000				.04398	.62674	
22	.27320E-01	366.00000				.04940	.68514	
23	.34354E-01	452.00000				.07375	.75949	
24	.40789E-01	633.00000				.10273	.86222	
25	.47223E-01	603.00000				.07314	.91736	
26	.51658E-01	194.00000				.03148	.96884	
27	.60043E-01	71.00000				.01152	.98036	
28	.65527E-01	43.00000				.00598	.98734	
29	.72462E-01	33.00000				.00536	.99270	
30	.73396E-01	26.00000				.00422	.99692	
31	.83811E-01	9.00000				.00146	.99838	
32	.92266E-01	1.00000				.00016	.99954	
33	.95700E-01	1.00000				.00016	.99970	
34	.11157E-01	2.00000				.00032	.99903	
35	.11800E-01	1.00000				.00016	.99919	
36	.13087E-01	1.00000				.00016	.99935	
37	.13731E-01	2.00000				.00012	.99968	
38	.20165E-01	1.00000				.00016	.99984	
39	.20409E-01	1.00000				.00016	1.00000	

TABLE 3-14. DISTRIBUTION FUNCTION OF THE CROSS-CORRELATION SURFACE OF THE 1-mrad AND 2-mrad
SENSOR FOV MASK AND THE TARGET AND BACKGROUND SCENES (Sheet 5 of 30)

COMPOSITE OF 17 FILES

CROSS CORRELATION

1 MR SENSOR FOV MASK 1000 FT

FAMS 4 AUG 77 3-5 NH GRASS

INDEX	COEF	HIST	PROB	CUM PROB
75	-.21607E-01	4.00000	.00004	.00004
74	-.21380E-01	8.00000	.00008	.00011
73	-.21153E-01	8.00000	.00008	.00019
72	-.20926E-01	7.00000	.00007	.00026
71	-.20699E-01	7.00000	.00007	.00032
70	-.20473E-01	3.00000	.00003	.00035
69	-.20246E-01	5.00000	.00005	.00040
68	-.20019E-01	9.00000	.00009	.00049
67	-.19792E-01	7.00000	.00007	.00055
66	-.19564E-01	3.00000	.00003	.00058
65	-.19339E-01	5.00000	.00005	.00063
64	-.19112E-01	4.00000	.00004	.00067
63	-.18885E-01	6.00000	.00006	.00073
62	-.18658E-01	1.00000	.00001	.00074
61	-.18432E-01	2.00000	.00002	.00075
60	-.18205E-01	6.00000	.00006	.00081
59	-.17978E-01	9.00000	.00009	.00090
58	-.17751E-01	11.00000	.00011	.00100
57	-.17524E-01	4.00000	.00004	.00104
56	-.17298E-01	11.00000	.00011	.00115
55	-.17071E-01	7.00000	.00007	.00121
54	-.16844E-01	5.00000	.00005	.00126
53	-.16617E-01	6.00000	.00006	.00132
52	-.16390E-01	12.00000	.00011	.00143
51	-.16164E-01	13.00000	.00012	.00156
50	-.15937E-01	5.00000	.00005	.00160
49	-.15710E-01	5.00000	.00005	.00165
48	-.15483E-01	3.00000	.00003	.00168
47	-.15256E-01	3.00000	.00003	.00171
46	-.15030E-01	4.00000	.00004	.00175
45	-.14803E-01	3.00000	.00003	.00178
44	-.14576E-01	3.00000	.00003	.00180
43	-.14349E-01	4.00000	.00004	.00184
42	-.14122E-01	6.00000	.00006	.00190
41	-.13895E-01	7.00000	.00007	.00197
40	-.13668E-01	6.00000	.00006	.00202
39	-.13442E-01	7.00000	.00007	.00209
38	-.13215E-01	10.00000	.00010	.00219
37	-.12988E-01	3.00000	.00003	.00221
36	-.12762E-01	3.00000	.00003	.00224
35	-.12535E-01	3.00000	.00003	.00227
34	-.12308E-01	4.00000	.00004	.00231
33	-.12081E-01	5.00000	.00005	.00236
32	-.11855E-01	2.00000	.00002	.00239
31	-.11628E-01	3.00000	.00003	.00242
30	-.11401E-01	2.00000	.00002	.00243
29	-.11174E-01	2.00000	.00002	.00245
28	-.10947E-01	7.00000	.00007	.00252
27	-.10720E-01	7.00000	.00007	.00259
26	-.10494E-01	7.00000	.00007	.00260
25	-.10267E-01	1.00000	.00001	.00265
24	-.10040E-01	1.00000	.00001	.00269
23	-.09813E-01	6.00000	.00006	.00276
22	-.09586E-01	4.00000	.00004	.00284
21	-.09359E-01	7.00000	.00007	.00284
20	-.09132E-01	4.00000	.00004	.00284

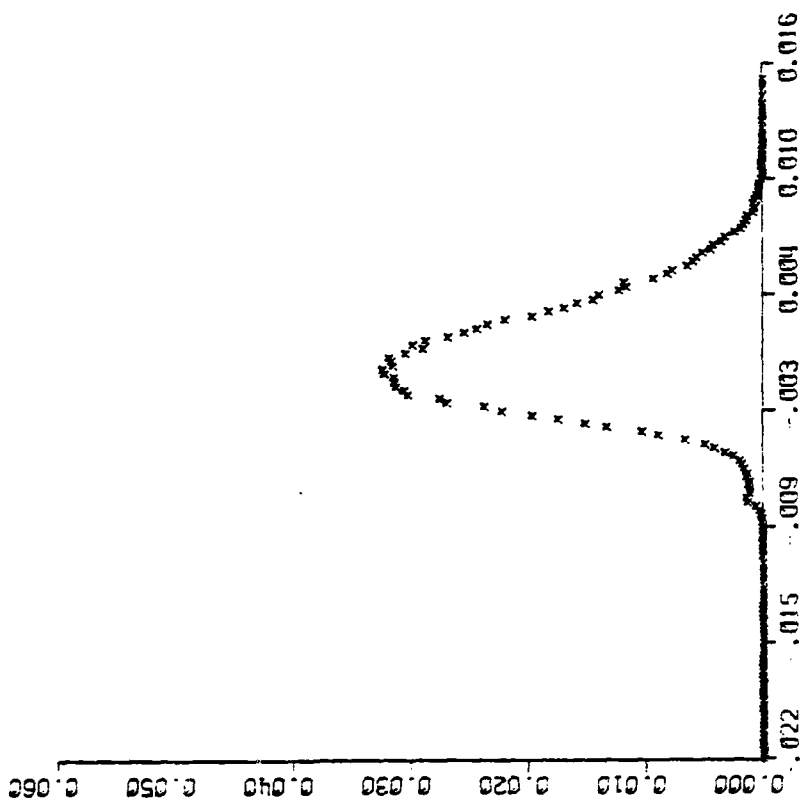


TABLE 3-14. DISTRIBUTION FUNCTION OF THE CROSS-CORRELATION SURFACE OF THE 1-mrad AND 2-mrad
SENSOR FOV MASK AND THE TARGET AND BACKGROUND SCENES (Sheet 6 of 30)

INDEX	COEF	MIST	PMON	CUM. PROB
19	-.49062E-02	10.00000	.00010	.00293
18	-.86794E-02	23.00000	.00022	.00315
17	-.44526E-02	6.00000	.00006	.00121
16	-.42258E-02	23.00000	.00022	.00343
15	-.79900E-02	40.00000	.00034	.00381
14	-.77721E-02	74.00000	.00071	.00452
13	-.75455E-02	149.00000	.00142	.00594
12	-.73187E-02	156.00000	.00149	.00743
11	-.70919E-02	130.00000	.00124	.00867
10	-.68651E-02	123.00000	.00117	.00984
9	-.66383E-02	131.00000	.00125	.01109
8	-.64115E-02	130.00000	.00124	.01233
7	-.61847E-02	154.00000	.00147	.01380
6	-.59579E-02	151.00000	.00144	.01525
5	-.57311E-02	176.00000	.00170	.01694
4	-.55043E-02	194.00000	.00195	.01880
3	-.52775E-02	221.00000	.00211	.02091
2	-.50507E-02	275.00000	.00263	.02353
1	-.48239E-02	341.00000	.00326	.02679
0	-.45971E-02	440.00000	.00420	.03099
1	-.43704E-02	528.00000	.00504	.03603
2	-.41436E-02	701.00000	.00669	.04272
3	-.39168E-02	944.00000	.00901	.05171
4	-.36900E-02	1094.00000	.01044	.06217
5	-.34632E-02	1407.00000	.01343	.07561
6	-.32364E-02	1593.00000	.01521	.09081
7	-.30096E-02	1837.00000	.01754	.10835
8	-.27828E-02	2061.00000	.01967	.12802
9	-.25560E-02	2332.00000	.02226	.15029
10	-.23292E-02	2493.00000	.02340	.17408
11	-.21024E-02	2830.00000	.02702	.20110
12	-.18756E-02	2890.00000	.02749	.22869
13	-.16488E-02	3171.00000	.03027	.25896
14	-.14220E-02	3277.00000	.03061	.28957
15	-.11952E-02	3298.00000	.03128	.32086
16	-.09684E-03	3301.00000	.03144	.35214
17	-.07416E-03	3383.00000	.03151	.38385
18	-.05148E-03	3409.00000	.03254	.41615
19	-.02880E-03	3311.00000	.03254	.44869
20	-.01612E-04	3318.00000	.03161	.48010
21	-.01551E-03	3146.00000	.03174	.51197
22	-.01230E-03	3140.00000	.03045	.54391
23	-.01010E-03	3036.00000	.02998	.57616
24	-.00799E-03	3130.00000	.02988	.60815
25	-.00727E-02	3022.00000	.02985	.63323
26	-.00675E-02	2818.00000	.02900	.66207
27	-.00633E-02	2673.00000	.02552	.68908
28	-.00591E-02	2551.00000	.02435	.71449
29	-.00551E-02	2462.00000	.02350	.73985
30	-.00511E-02	2307.00000	.02202	.76235
31	-.00471E-02	2067.00000	.01971	.78417
32	-.00431E-02	1920.00000	.01833	.80410
33	-.00391E-02	1781.00000	.01700	.82243
34	-.00351E-02	1669.00000	.01593	.83941
35	-.00311E-02	1515.00000	.01446	.85517
36	-.00271E-02	1464.00000	.01308	.86983
37	-.00231E-02	1290.00000	.01211	.88380
38	-.00191E-02	1228.00000	.01172	.89612
39				.90786

TABLE 3-14. DISTRIBUTION FUNCTION OF THE CROSS-CORRELATION SURFACE OF THE 1-mrad AND 2-mrad
SENSOR FOV MASK AND THE TARGET AND BACKGROUND SCENES (Sheet 7 of 30)

INDEX	COEF	HIST	PROR	CUM PROR
41	.4274E-02	1251.00000	.01194	.91978
42	.44746E-02	983.00000	.00918	.92917
43	.47014E-02	864.00000	.00825	.93742
44	.49282E-02	815.00000	.00778	.94520
45	.51550E-02	684.00000	.00653	.95172
46	.53818E-02	633.00000	.00604	.95777
47	.56085E-02	600.00000	.00573	.96350
48	.58353E-02	542.00000	.00517	.96867
49	.60621E-02	475.00000	.00453	.97320
50	.62889E-02	448.00000	.00428	.97748
1	.65157E-02	372.00000	.00355	.98103
2	.67425E-02	350.00000	.00334	.98437
3	.69693E-02	265.00000	.00253	.98690
4	.71961E-02	199.00000	.00190	.98880
5	.74229E-02	179.00000	.00171	.99051
6	.76497E-02	156.00000	.00149	.99200
7	.78765E-02	148.00000	.00141	.99341
8	.81033E-02	91.00000	.00049	.99430
9	.83301E-02	81.00000	.00079	.99509
10	.85569E-02	94.00000	.00090	.99599
11	.87837E-02	78.00000	.00074	.99674
12	.90104E-02	61.00000	.00058	.99732
13	.92372E-02	45.00000	.00043	.99775
14	.94640E-02	37.00000	.00035	.99810
15	.96908E-02	46.00000	.00044	.99854
16	.99176E-02	22.00000	.00021	.99875
17	.10144E-01	15.00000	.00014	.99889
18	.10371E-01	11.00000	.00012	.99902
19	.10598E-01	18.00000	.00017	.99919
20	.10825E-01	15.00000	.00014	.99933
21	.11052E-01	6.00000	.00006	.99939
22	.11279E-01	12.00000	.00011	.99950
23	.11505E-01	8.00000	.00008	.99958
24	.11732E-01	8.00000	.00008	.99966
25	.11959E-01	4.00000	.00004	.99969
26	.12186E-01	6.00000	.00006	.99975
27	.12412E-01	4.00000	.00004	.99979
28	.12639E-01	2.00000	.00002	.99981
29	.12866E-01	6.00000	.00006	.99987
30	.13093E-01	2.00000	.00002	.99989
31	.13320E-01	2.00000	.00002	.99990
32	.13546E-01	2.00000	.00002	.99992
33	.13773E-01	2.00000	.00002	.99994
34	.14000E-01	2.00000	.00002	.99996
35	.14227E-01	1.00000	.00001	.99997
36	.14453E-01	1.00000	.00001	.99998
37	.14680E-01	1.00000	.00001	.99999
38	.14907E-01	1.00000	.00001	.99999
39	.15134E-01	1.00000	.00001	.99999
40	.15361E-01	1.00000	.00001	.99999
COMPOSITE MEAN AND STANDARD DEVIATION				.29766384E-02

TABLE 3-14. DISTRIBUTION FUNCTION OF THE CROSS-CORRELATION SURFACE OF THE 1-mrad AND 2-mrad
SENSOR FOV MASK AND THE TARGET AND BACKGROUND SCENES (Sheet 8 of 30)

COMPOSITE OF 16 FILES
CROSS CORRELATION
1 MR SENSOR FOV MASK 1000 FT
FAWS 4 AUG 77 3-5 PM TREES

INDEX	COEF	HIST	PRJH	CIIM PQOH
40	-61744E-02	1.00000	.00000	.00000
39	-60711E-02	1.00000	.00001	.00002
38	-59719E-02	1.00000	.00000	.00000
37	-58706E-02	6.00000	.00003	.00005
36	-57693E-02	6.00000	.00003	.00000
35	-56681E-02	6.00000	.00004	.00012
34	-55668E-02	6.00000	.00003	.00015
33	-54655E-02	5.00000	.00002	.00017
32	-53643E-02	10.00000	.00005	.00022
31	-52630E-02	6.00000	.00004	.00026
30	-51617E-02	6.00000	.00003	.00029
29	-50605E-02	10.00000	.00005	.00033
28	-49592E-02	13.00000	.00006	.00040
27	-48579E-02	16.00000	.00009	.00047
26	-47567E-02	31.00000	.00015	.00062
25	-46554E-02	24.00000	.00011	.00073
24	-45541E-02	37.00000	.00018	.00091
23	-44529E-02	41.00000	.00020	.00111
22	-43516E-02	50.00000	.00024	.00135
21	-42503E-02	67.00000	.00032	.00167
20	-41491E-02	71.00000	.00034	.00200
19	-40478E-02	109.00000	.00052	.00252
18	-39465E-02	143.00000	.00058	.00321
17	-38453E-02	160.00000	.00076	.00397
16	-37440E-02	244.00000	.00116	.00513
15	-36427E-02	297.00000	.00142	.00555
14	-35415E-02	355.00000	.00169	.00824
13	-34402E-02	423.00000	.00202	.01026
12	-33389E-02	489.00000	.00233	.01260
11	-32377E-02	539.00000	.00257	.01517
10	-31364E-02	520.00000	.00248	.01765
9	-30351E-02	636.00000	.00303	.02068
8	-29339E-02	624.00000	.00298	.02366
7	-28326E-02	704.00000	.00336	.02702
6	-27313E-02	835.00000	.00398	.03100
5	-26301E-02	882.00000	.00421	.03521
4	-25288E-02	950.00000	.00453	.03974
3	-24275E-02	1189.00000	.00567	.04542
2	-23263E-02	1414.00000	.00675	.05216
1	-22250E-02	1579.00000	.00753	.05940
0	-21238E-02	1809.00000	.00863	.06833
1	-20225E-02	1875.00000	.00895	.07728
2	-19213E-02	2125.00000	.01014	.08741
3	-18200E-02	2442.00000	.01165	.09907
4	-17187E-02	2744.00000	.01311	.11311
5	-16174E-02	3211.00000	.01532	.12843
6	-15162E-02	3438.00000	.01831	.14675
7	-14149E-02	4075.00000	.02112	.16619
8	-13136E-02	4442.00000	.02466	.18738
9	-12124E-02	4537.00000	.02846	.20903
10	-11111E-02	5169.00000	.03306	.23369
11	-10098E-02	5419.00000	.03745	.25955
12	-9085E-02	5711.00000	.04240	.28680
13	-8072E-02	5974.00000	.04740	.31510

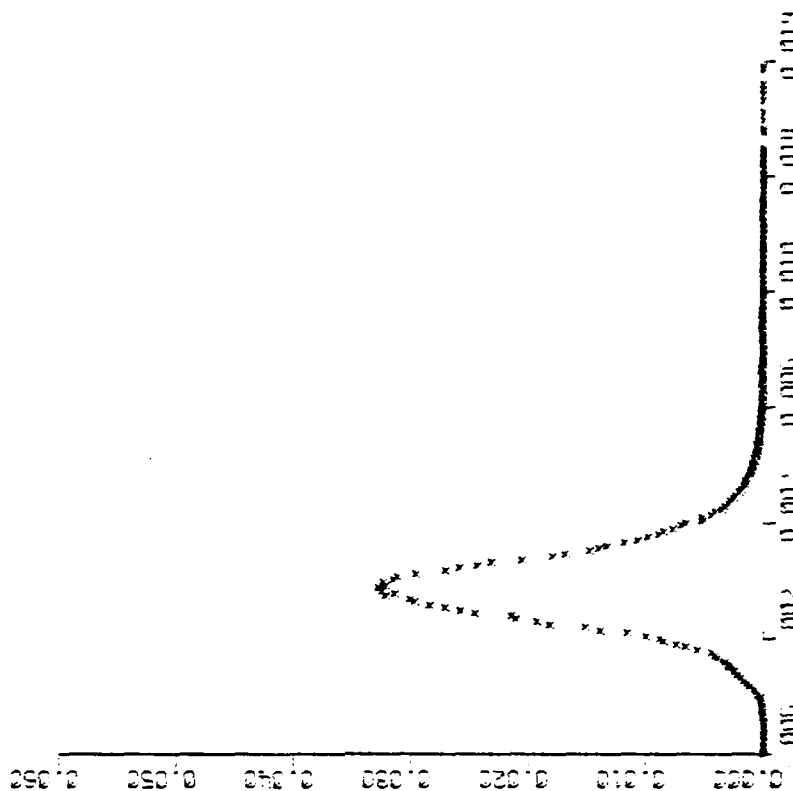


TABLE 3-14. DISTRIBUTION FUNCTION OF THE CROSS-CORRELATION SURFACE OF THE 1-mrad AND 2-mrad
SENSOR FOV MASK AND THE TARGET AND BACKGROUND SCENES (Sheet 9 of 30)

INDEX	COEF	WIST	P-0H	CUM. PROB
15	-.00730F-01	6255.00000	.02986	.36515
16	-.00603F-01	6320.00000	.01015	.37530
17	-.00476F-01	6780.00000	.03235	.40765
18	-.00350F-01	6611.00000	.01156	.43219
19	-.00223F-01	6941.00000	.01266	.47183
20	-.00097F-01	6901.00000	.01293	.50476
21	-.00070F-01	6775.00000	.01233	.53708
22	-.00043F-01	6406.00000	.01247	.56956
23	-.00017F-01	6633.00000	.01165	.60121
24	.00010F-01	6564.00000	.01132	.63252
25	.00036F-01	6219.00000	.02967	.66220
26	.00663F-01	5701.00000	.02720	.68940
27	.00749F-01	5455.00000	.02603	.71543
28	.00916F-01	5113.00000	.02449	.73992
29	.01043F-01	4876.00000	.02326	.76317
30	.01169F-01	4346.00000	.02074	.78391
31	.01296F-01	3402.00000	.01914	.80205
32	.01422F-01	3553.00000	.01695	.81900
33	.01551F-01	3117.00000	.01447	.83387
34	.01684F-01	2954.00000	.01409	.84797
35	.01808F-01	2800.00000	.01336	.86133
36	.01933F-01	2500.00000	.01103	.87326
37	.02064F-01	2270.00000	.01083	.88409
38	.02184F-01	2084.00000	.00994	.89403
39	.02311F-01	1891.00000	.00902	.90305
40	.02433F-01	1796.00000	.00857	.91162
41	.02564F-01	1630.00000	.00778	.91940
42	.02696F-01	1497.00000	.00714	.92654
43	.02814F-01	1394.00000	.00665	.93319
44	.02946F-01	1110.00000	.00530	.93949
45	.02107F-02	1111.00000	.00530	.94379
46	.02319F-02	951.00000	.00454	.94833
47	.02432F-02	874.00000	.00417	.95250
48	.02536F-02	761.00000	.00363	.95613
49	.02637F-02	721.00000	.00344	.95957
50	.02737F-02	623.00000	.00297	.96254
1	.02838F-02	615.00000	.00293	.96547
2	.02935F-02	543.00000	.00259	.96807
3	.03040F-02	513.00000	.00245	.97051
4	.03142F-02	444.00000	.00212	.97263
5	.03243F-02	399.00000	.00170	.97454
6	.03346F-02	350.00000	.00167	.97621
7	.03450F-02	336.00000	.00160	.97781
8	.03547F-02	326.00000	.00156	.97936
9	.03644F-02	290.00000	.00138	.98075
10	.03747F-02	271.00000	.00129	.98204
11	.03850F-02	245.00000	.00117	.98321
12	.03952F-02	224.00000	.00109	.98430
13	.04053F-02	210.00000	.00104	.98534
14	.04154F-02	201.00000	.00096	.98630
15	.04256F-02	174.00000	.00085	.98715
16	.04357F-02	191.00000	.00081	.98806
17	.04459F-02	150.00000	.00074	.98881
18	.04560F-02	143.00000	.00067	.98968
19	.04661F-02	127.00000	.00061	.99009
20	.04762F-02	120.00000	.00057	.99066
21	.04863F-02	117.00000	.00055	.99121
22	.04964F-02	117.00000	.00055	.99176
23	.05065F-02	114.00000	.00057	.99233

TABLE 3-14. DISTRIBUTION FUNCTION OF THE CROSS-CORRELATION SURFACE OF THE 1-mrad AND 2-mrad
SENSOR FOV MASK AND THE TARGET AND BACKGROUND SCENES (Sheet 10 of 30)

INDEX	COEFF	HIST	P234	CIN PROB
24	.51674F-02	97.00000	.00046	.99259
25	.52687F-02	87.00000	.00042	.99101
26	.53699F-02	76.00000	.00036	.99137
27	.54712F-02	65.00000	.00031	.99168
28	.55725F-02	54.00000	.00025	.99198
29	.56737F-02	43.00000	.00020	.99223
30	.57750F-02	32.00000	.00016	.99249
31	.58762F-02	21.00000	.00012	.99274
32	.59775F-02	10.00000	.00008	.99299
33	.60788F-02	0.00000	.00004	.99321
34	.61800F-02	0.00000	.00001	.99348
35	.62813F-02	0.00000	.00000	.99372
36	.63826F-02	0.00000	.00000	.99396
37	.64839F-02	0.00000	.00000	.99421
38	.65851F-02	0.00000	.00000	.99445
39	.66864F-02	0.00000	.00000	.99469
40	.67876F-02	0.00000	.00000	.99494
41	.68889F-02	0.00000	.00000	.99518
42	.69902F-02	0.00000	.00000	.99543
43	.70914F-02	0.00000	.00000	.99567
44	.71927F-02	0.00000	.00000	.99592
45	.72940F-02	0.00000	.00000	.99616
46	.73952F-02	0.00000	.00000	.99641
47	.74965F-02	0.00000	.00000	.99665
48	.75978F-02	0.00000	.00000	.99689
49	.76990F-02	0.00000	.00000	.99714
50	.78003F-02	0.00000	.00000	.99738
51	.79016F-02	0.00000	.00000	.99763
52	.80028F-02	0.00000	.00000	.99787
53	.81041F-02	0.00000	.00000	.99812
54	.82054F-02	0.00000	.00000	.99836
55	.83066F-02	0.00000	.00000	.99861
56	.84079F-02	0.00000	.00000	.99885
57	.85092F-02	0.00000	.00000	.99910
58	.86104F-02	0.00000	.00000	.99934
59	.87117F-02	0.00000	.00000	.99959
60	.88130F-02	0.00000	.00000	.99983
61	.89142F-02	0.00000	.00000	.99999
62	.90155F-02	0.00000	.00000	.99999
63	.91168F-02	0.00000	.00000	.99999
64	.92180F-02	0.00000	.00000	.99999
65	.93193F-02	0.00000	.00000	.99999
66	.94206F-02	0.00000	.00000	.99999
67	.95219F-02	0.00000	.00000	.99999
68	.96231F-02	0.00000	.00000	.99999
69	.97244F-02	0.00000	.00000	.99999
70	.98256F-02	0.00000	.00000	.99999
71	.99269F-02	0.00000	.00000	.99999
72	.10028F-01	0.00000	.00000	.99999
73	.10129F-01	0.00000	.00000	.99999
74	.10231F-01	0.00000	.00000	.99999
75	.10332F-01	0.00000	.00000	.99999
76	.10433F-01	0.00000	.00000	.99999
77	.10534F-01	0.00000	.00000	.99999
78	.10636F-01	0.00000	.00000	.99999
79	.10737F-01	0.00000	.00000	.99999
80	.10838F-01	0.00000	.00000	.99999
81	.10940F-01	0.00000	.00000	.99999
82	.11041F-01	0.00000	.00000	.99999

TABLE 3-14. DISTRIBUTION FUNCTION OF THE CROSS-CORRELATION SURFACE OF THE 1-mrad AND 2-mrad
SENSOR FOV MASK AND THE TARGET AND BACKGROUND SCENES (Sheet 11 of 30)

INDEX	COEF	HIST	PRIM	CUM PRIM
83	.11149E-01	1.00000	.00000	.00000
84	.11244E-01	2.00000	.00001	.00001
85	.11345E-01	1.00000	.00000	.00000
86	.11446E-01	6.00000	.00003	.00003
87	.11547E-01	1.00000	.00001	.00004
88	.11648E-01	7.00000	.00003	.00007
89	.11749E-01	4.00000	.00004	.00011
90	.11850E-01	4.00000	.00002	.00013
91	.11951E-01	2.00000	.00001	.00014
92	.12052E-01	2.00000	.00001	.00015
93	.12153E-01	1.00000	.00000	.00015
94	.12254E-01	1.00000	.00001	.00016
95	.12355E-01	1.00000	.00001	.00017
96	.12456E-01	2.00000	.00001	.00018
97	.12557E-01	3.00000	.00001	.00019
98	.12658E-01	5.00000	.00002	.00021
99	.12759E-01	1.00000	.00000	.00021
100	.12860E-01	1.00000	.00001	.00022
101	.12961E-01	2.00000	.00001	.00023
102	.13062E-01	1.00000	.00001	.00024
103	.13163E-01	1.00000	.00001	.00025
104	.13264E-01	1.00000	.00000	.00025
105	.13365E-01	1.00000	.00001	.00026
106	.13466E-01	1.00000	.00001	.00027
107	.13567E-01	2.00000	.00001	.00028
108	.13668E-01	1.00000	.00000	.00028
109	.13769E-01	1.00000	.00000	.00028
110	.13870E-01	4.00000	.00002	.00030
111	.13971E-01	2.00000	.00001	.00031
112	.14072E-01	1.00000	.00000	.00031
113	.14173E-01	5.00000	.00002	.00033
114	.14274E-01	2.00000	.00001	.00034
115	.14375E-01	2.00000	.00001	.00035
116	.14476E-01	1.00000	.00000	.00035
117	.14577E-01	1.00000	.00000	.00035
118	.14678E-01	1.00000	.00000	.00035
119	.14779E-01	1.00000	.00000	.00035
120	.14880E-01	1.00000	.00000	.00035
121	.14981E-01	1.00000	.00000	.00035
122	.15082E-01	1.00000	.00000	.00035
123	.15183E-01	1.00000	.00000	.00035
124	.15284E-01	1.00000	.00000	.00035
125	.15385E-01	1.00000	.00000	.00035
126	.15486E-01	2.00000	.00001	.00036
127	.15587E-01	1.00000	.00000	.00036
128	.15688E-01	2.00000	.00001	.00037
129	.15789E-01	2.00000	.00001	.00038
130	.15890E-01	1.00000	.00000	.00038
131	.15991E-01	1.00000	.00000	.00038
132	.16092E-01	1.00000	.00000	.00038
133	.16193E-01	2.00000	.00001	.00039
134	.16294E-01	2.00000	.00001	.00040
135	.16395E-01	1.00000	.00000	.00040
136	.16496E-01	1.00000	.00000	.00040
137	.16597E-01	1.00000	.00000	.00040
138	.16698E-01	1.00000	.00000	.00040
139	.16799E-01	1.00000	.00000	.00040
140	.16900E-01	1.00000	.00000	.00040
141	.17001E-01	1.00000	.00000	.00040
142	.17102E-01	1.00000	.00000	.00040
143	.17203E-01	1.00000	.00000	.00040
144	.17304E-01	1.00000	.00000	.00040
145	.17405E-01	1.00000	.00000	.00040
146	.17506E-01	1.00000	.00000	.00040
147	.17607E-01	1.00000	.00000	.00040
148	.17708E-01	1.00000	.00000	.00040
149	.17809E-01	1.00000	.00000	.00040
150	.17910E-01	1.00000	.00000	.00040
151	.18011E-01	1.00000	.00000	.00040
152	.18112E-01	1.00000	.00000	.00040
153	.18213E-01	1.00000	.00000	.00040
154	.18314E-01	1.00000	.00000	.00040
155	.18415E-01	1.00000	.00000	.00040
COMPOSITE MEAN AND STANDARD DEVIATION				.1558199E-01

TABLE 3-14. DISTRIBUTION FUNCTION OF THE CROSS-CORRELATION SURFACE OF THE 1-mrad AND 2-mrad
SENSOR FOV MASK AND THE TARGET AND BACKGROUND SCENES (Sheet 12 of 30)

COMPOSITE OF 10 FILES
CROSS CORRELATION
1 MP SENSOR FOV MASK 1000 FT
FAWS 4 AUG 77 1-5 MI ASPHALT ROADS

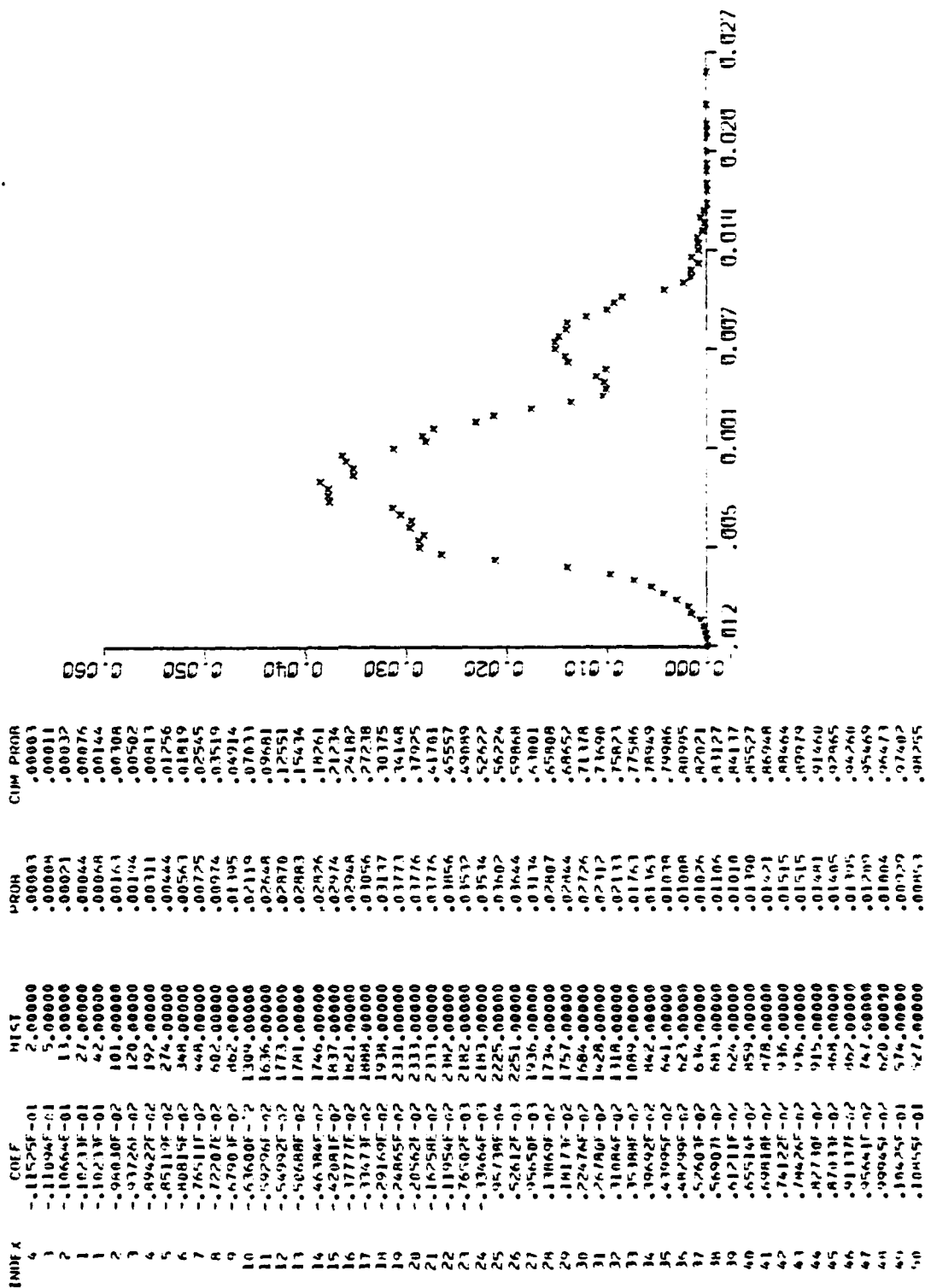


TABLE 3-14. DISTRIBUTION FUNCTION OF THE CROSS-CORRELATION SURFACE OF THE 1-mrad AND 2-mrad
SENSOR FOV MASK AND THE TARGET AND BACKGROUND SCENES (Sheet 13 of 30)

INDEX	COEFF	HIST	PRDH	CUM PRDH
1	.11266F-01	264.00000	.00427	.98582
2	.11716F-01	151.00000	.00264	.98927
3	.12166F-01	101.00000	.00163	.99090
4	.12577F-01	97.00000	.00157	.99247
5	.13007F-01	54.00000	.00094	.99341
6	.13438F-01	96.00000	.00155	.99497
7	.13868F-01	57.00000	.00092	.99589
8	.14298F-01	56.00000	.00091	.99679
9	.14729F-01	62.00000	.00100	.99780
10	.15159F-01	33.00000	.00053	.99813
11	.15589F-01	18.00000	.00029	.99862
12	.16020F-01	44.00000	.00071	.99934
13	.16450F-01	16.00000	.00026	.99960
14	.16881F-01	3.00000	.00005	.99964
15	.17311F-01	3.00000	.00005	.99969
16	.17741F-01	1.00000	.00002	.99971
17	.18172F-01	3.00000	.00005	.99976
18	.18602F-01	2.00000	.00003	.99979
19	.19032F-01	3.00000	.00003	.99984
20	.19463F-01	3.00000	.00005	.99987
21	.19893F-01	2.00000	.00003	.99990
22	.20324F-01	1.00000	.00002	.99992
23	.20754F-01	2.00000	.00003	.99994
24	.21184F-01	1.00000	.00002	.99994
25	.21615F-01	2.00000	.00003	.99997
26	.22045F-01	1.00000	.00002	.99998
27	.22475F-01	2.00000	.00003	.99999
28	.22905F-01	1.00000	.00002	.99999
29	.23336F-01	1.00000	.00002	1.00000
30	.23766F-01	1.00000	.00002	1.00000
31	.24196F-01	1.00000	.00002	1.00000
32	.24626F-01	1.00000	.00002	1.00000
33	.25056F-01	1.00000	.00002	1.00000
34	.25486F-01	1.00000	.00002	1.00000
35	.25916F-01	1.00000	.00002	1.00000
36	.26346F-01	1.00000	.00002	1.00000
37	.26776F-01	1.00000	.00002	1.00000
38	.27206F-01	1.00000	.00002	1.00000
39	.27636F-01	1.00000	.00002	1.00000
40	.28066F-01	1.00000	.00002	1.00000
41	.28496F-01	1.00000	.00002	1.00000
42	.28926F-01	1.00000	.00002	1.00000
43	.29356F-01	1.00000	.00002	1.00000
44	.29786F-01	1.00000	.00002	1.00000
45	.30216F-01	1.00000	.00002	1.00000
46	.30646F-01	1.00000	.00002	1.00000
47	.31076F-01	1.00000	.00002	1.00000
48	.31506F-01	1.00000	.00002	1.00000
49	.31936F-01	1.00000	.00002	1.00000
50	.32366F-01	1.00000	.00002	1.00000
51	.32796F-01	1.00000	.00002	1.00000
52	.33226F-01	1.00000	.00002	1.00000
53	.33656F-01	1.00000	.00002	1.00000
54	.34086F-01	1.00000	.00002	1.00000
55	.34516F-01	1.00000	.00002	1.00000
56	.34946F-01	1.00000	.00002	1.00000
57	.35376F-01	1.00000	.00002	1.00000
58	.35806F-01	1.00000	.00002	1.00000
59	.36236F-01	1.00000	.00002	1.00000
60	.36666F-01	1.00000	.00002	1.00000
61	.37096F-01	1.00000	.00002	1.00000
62	.37526F-01	1.00000	.00002	1.00000
63	.37956F-01	1.00000	.00002	1.00000
64	.38386F-01	1.00000	.00002	1.00000
65	.38816F-01	1.00000	.00002	1.00000
66	.39246F-01	1.00000	.00002	1.00000
67	.39676F-01	1.00000	.00002	1.00000
68	.40106F-01	1.00000	.00002	1.00000
69	.40536F-01	1.00000	.00002	1.00000
70	.40966F-01	1.00000	.00002	1.00000
71	.41396F-01	1.00000	.00002	1.00000
72	.41826F-01	1.00000	.00002	1.00000
73	.42256F-01	1.00000	.00002	1.00000
74	.42686F-01	1.00000	.00002	1.00000
75	.43116F-01	1.00000	.00002	1.00000
76	.43546F-01	1.00000	.00002	1.00000
77	.43976F-01	1.00000	.00002	1.00000
78	.44406F-01	1.00000	.00002	1.00000
79	.44836F-01	1.00000	.00002	1.00000
80	.45266F-01	1.00000	.00002	1.00000
81	.45696F-01	1.00000	.00002	1.00000
82	.46126F-01	1.00000	.00002	1.00000
83	.46556F-01	1.00000	.00002	1.00000
84	.46986F-01	1.00000	.00002	1.00000
85	.47416F-01	1.00000	.00002	1.00000
86	.47846F-01	1.00000	.00002	1.00000
87	.48276F-01	1.00000	.00002	1.00000
88	.48706F-01	1.00000	.00002	1.00000
89	.49136F-01	1.00000	.00002	1.00000
90	.49566F-01	1.00000	.00002	1.00000
91	.50000F-01	1.00000	.00002	1.00000
92	.50430F-01	1.00000	.00002	1.00000
93	.50860F-01	1.00000	.00002	1.00000
94	.51290F-01	1.00000	.00002	1.00000
95	.51720F-01	1.00000	.00002	1.00000
96	.52150F-01	1.00000	.00002	1.00000
97	.52580F-01	1.00000	.00002	1.00000
98	.53010F-01	1.00000	.00002	1.00000
99	.53440F-01	1.00000	.00002	1.00000
100	.53870F-01	1.00000	.00002	1.00000
101	.54300F-01	1.00000	.00002	1.00000
102	.54730F-01	1.00000	.00002	1.00000
103	.55160F-01	1.00000	.00002	1.00000
104	.55590F-01	1.00000	.00002	1.00000
105	.56020F-01	1.00000	.00002	1.00000
106	.56450F-01	1.00000	.00002	1.00000
107	.56880F-01	1.00000	.00002	1.00000
108	.57310F-01	1.00000	.00002	1.00000
109	.57740F-01	1.00000	.00002	1.00000
110	.58170F-01	1.00000	.00002	1.00000
111	.58600F-01	1.00000	.00002	1.00000
112	.59030F-01	1.00000	.00002	1.00000
113	.59460F-01	1.00000	.00002	1.00000
114	.59890F-01	1.00000	.00002	1.00000
115	.60320F-01	1.00000	.00002	1.00000
116	.60750F-01	1.00000	.00002	1.00000
117	.61180F-01	1.00000	.00002	1.00000
118	.61610F-01	1.00000	.00002	1.00000
119	.62040F-01	1.00000	.00002	1.00000
120	.62470F-01	1.00000	.00002	1.00000
121	.62900F-01	1.00000	.00002	1.00000
122	.63330F-01	1.00000	.00002	1.00000
123	.63760F-01	1.00000	.00002	1.00000
124	.64190F-01	1.00000	.00002	1.00000
125	.64620F-01	1.00000	.00002	1.00000
126	.65050F-01	1.00000	.00002	1.00000
127	.65480F-01	1.00000	.00002	1.00000
128	.65910F-01	1.00000	.00002	1.00000
129	.66340F-01	1.00000	.00002	1.00000
130	.66770F-01	1.00000	.00002	1.00000
131	.67200F-01	1.00000	.00002	1.00000
132	.67630F-01	1.00000	.00002	1.00000
133	.68060F-01	1.00000	.00002	1.00000
134	.68490F-01	1.00000	.00002	1.00000
135	.68920F-01	1.00000	.00002	1.00000
136	.69350F-01	1.00000	.00002	1.00000
137	.69780F-01	1.00000	.00002	1.00000
138	.70210F-01	1.00000	.00002	1.00000
139	.70640F-01	1.00000	.00002	1.00000
140	.71070F-01	1.00000	.00002	1.00000
141	.71500F-01	1.00000	.00002	1.00000
142	.71930F-01	1.00000	.00002	1.00000
143	.72360F-01	1.00000	.00002	1.00000
144	.72790F-01	1.00000	.00002	1.00000
145	.73220F-01	1.00000	.00002	1.00000
146	.73650F-01	1.00000	.00002	1.00000
147	.74080F-01	1.00000	.00002	1.00000
148	.74510F-01	1.00000	.00002	1.00000
149	.74940F-01	1.00000	.00002	1.00000
150	.75370F-01	1.00000	.00002	1.00000
151	.75800F-01	1.00000	.00002	1.00000
152	.76230F-01	1.00000	.00002	1.00000
153	.76660F-01	1.00000	.00002	1.00000
154	.77090F-01	1.00000	.00002	1.00000
155	.77520F-01	1.00000	.00002	1.00000
156	.77950F-01	1.00000	.00002	1.00000
157	.78380F-01	1.00000	.00002	1.00000
158	.78810F-01	1.00000	.00002	1.00000
159	.79240F-01	1.00000	.00002	1.00000
160	.79670F-01	1.00000	.00002	1.00000
161	.80100F-01	1.00000	.00002	1.00000
162	.80530F-01	1.00000	.00002	1.00000
163	.80960F-01	1.00000	.00002	1.00000
164	.81390F-01	1.00000	.00002	1.00000
165	.81820F-01	1.00000	.00002	1.00000
166	.82250F-01	1.00000	.00002	1.00000
167	.82680F-01	1.00000	.00002	1.00000
168	.83110F-01	1.00000	.00002	1.00000
169	.83540F-01	1.00000	.00002	1.00000
170	.83970F-01	1.00000	.00002	1.00000
171	.84400F-01	1.00000	.00002	1.00000
172	.84830F-01	1.00000	.00002	1.00000
173	.85260F-01	1.00000	.00002	1.00000
174	.85690F-01	1.00000	.00002	1.00000
175	.86120F-01	1.00000	.00002	1.00000
176	.86550F-01	1.00000	.00002	1.00000
177	.86980F-01	1.00000	.00002	1.00000
178	.87410F-01	1.00000	.00002	1.00000
179	.87840F-01	1.00000	.00002	1.00000
180	.88270F-01	1.00000	.00002	1.00000
181	.88700F-01	1.00000	.00002	1.00000
182	.89130F-01	1.00000	.00002	1.00000
183	.89560F-01	1.00000	.00002	1.00000
184	.89990F-01	1.00000	.00002	1.00000
185	.90420F-01	1.00000	.00002	1.00000
186	.90850F-01	1.00000	.00002	1.00000
187	.91280F-01	1.00000	.00002	1.00000
188	.91710F-01	1.00000	.00002	1.00000
189	.92140F-01	1.00000	.00002	1.00000
190	.92570F-01	1.00000	.00002	1.00000
191	.93000F-01	1.00000	.00002	1.00000
192	.93430F-01	1.00000	.00002	1.00000
193	.93860F-01	1.00000	.00002	1.00000
194	.94290F-01	1.00000	.00002	1.00000
195	.94720F-01	1.00000	.00002	1.00000
196	.95150F-01	1.00000	.00002	1.00000
197	.95580F-01	1.00000	.00002	1.00000
198	.96010F-01	1.00000	.00002	1.00000
199	.96440F-01	1.00000	.00002	1.00000
200	.96870F-01	1.00000	.00002	1.00000
201	.97300F-01	1.00000	.00002	1.00000
202	.97730F-01	1.00000	.00002	1.00000
203	.98160F-01	1.00000	.00002	1.

TABLE 3-14. DISTRIBUTION FUNCTION OF THE CROSS-CORRELATION SURFACE OF THE 1-mrad AND 2-mrad
SENSOR FOV MASK AND THE TARGET AND BACKGROUND SCENES (Sheet 14 of 30)

COMPOSITE OF
CROSS-CORRELATION
1 MM SENSOR FOV MASK 1000 FT
FAWS H AHS 77 1-5 MB BUILDINGS

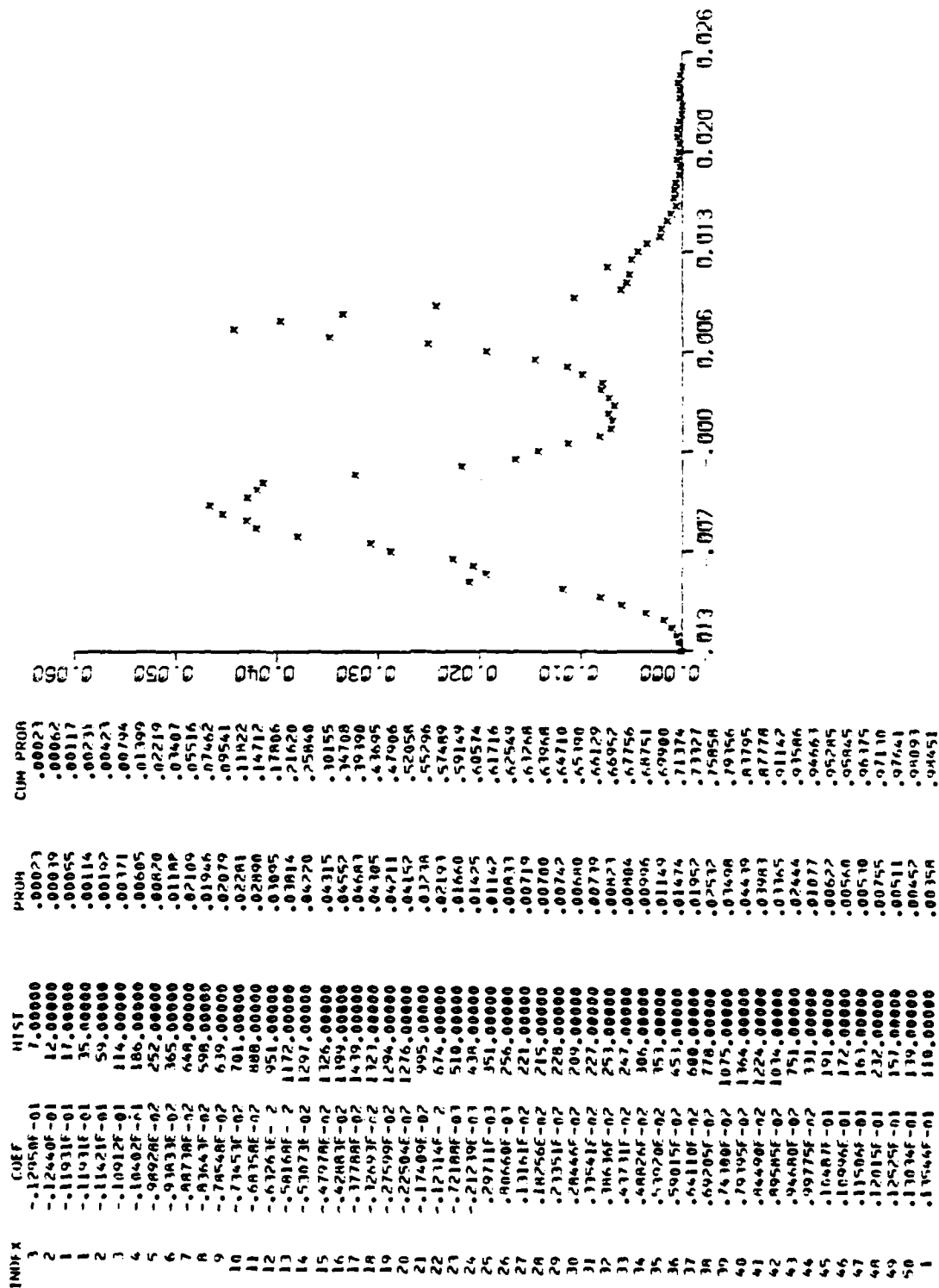


TABLE 3-14. DISTRIBUTION FUNCTION OF THE CROSS-CORRELATION SURFACE OF THE 1-mrad AND 2-mrad
SENSOR FOV MASK AND THE TARGET AND BACKGROUND SCENES (Sheet 15 of 30)

INDEX	COEF	HIST	PROR	CIM PROR
2	.14053F-01	72.00000	.00214	.98685
3	.14563F-01	67.00000	.00218	.98901
4	.15012F-01	50.00000	.00161	.99066
5	.15582F-01	38.00000	.00124	.99190
6	.16091F-01	22.00000	.00072	.99261
7	.16601F-01	29.00000	.00044	.99356
8	.17110F-01	27.00000	.00044	.99444
9	.17620F-01	24.00000	.00078	.99522
10	.18129F-01	11.00000	.00036	.99557
11	.18639E-01	8.00000	.00026	.99581
12	.19148F-01	17.00000	.00055	.99619
13	.19658F-01	12.00000	.00039	.99678
14	.20167F-01	9.00000	.00029	.99707
15	.20677E-01	14.00000	.00046	.99751
16	.21186E-01	17.00000	.00055	.99808
17	.21696F-01	12.00000	.00039	.99847
18	.22205F-01	5.00000	.00016	.99861
19	.22715E-01	1.00000	.00001	.99867
20	.23224F-01	8.00000	.00026	.99891
21	.23734E-01	8.00000	.00026	.99919
22	.24243F-01	14.00000	.00046	.99964
23	.24753F-01	10.00000	.00031	.99997
24	.25262F-01	1.00000	.00001	1.00000
COMPOSITE MEAN AND STANDARD DEVIATION				.4994066E-04
				.87079844E-02

TABLE 3-14. DISTRIBUTION FUNCTION OF THE CROSS-CORRELATION SURFACE OF THE 1-mrad AND 2-mrad SENSOR FOV MASK AND THE TARGET AND BACKGROUND SCENES (Sheet 18 of 30)

[illegible]

TABLE 3-14. DISTRIBUTION FUNCTION OF THE CROSS-CORRELATION SURFACE OF THE 1-mrad AND 2-mrad
SENSOR FOV MASK AND THE TARGET AND BACKGROUND SCENES (Sheet 19 of 30)

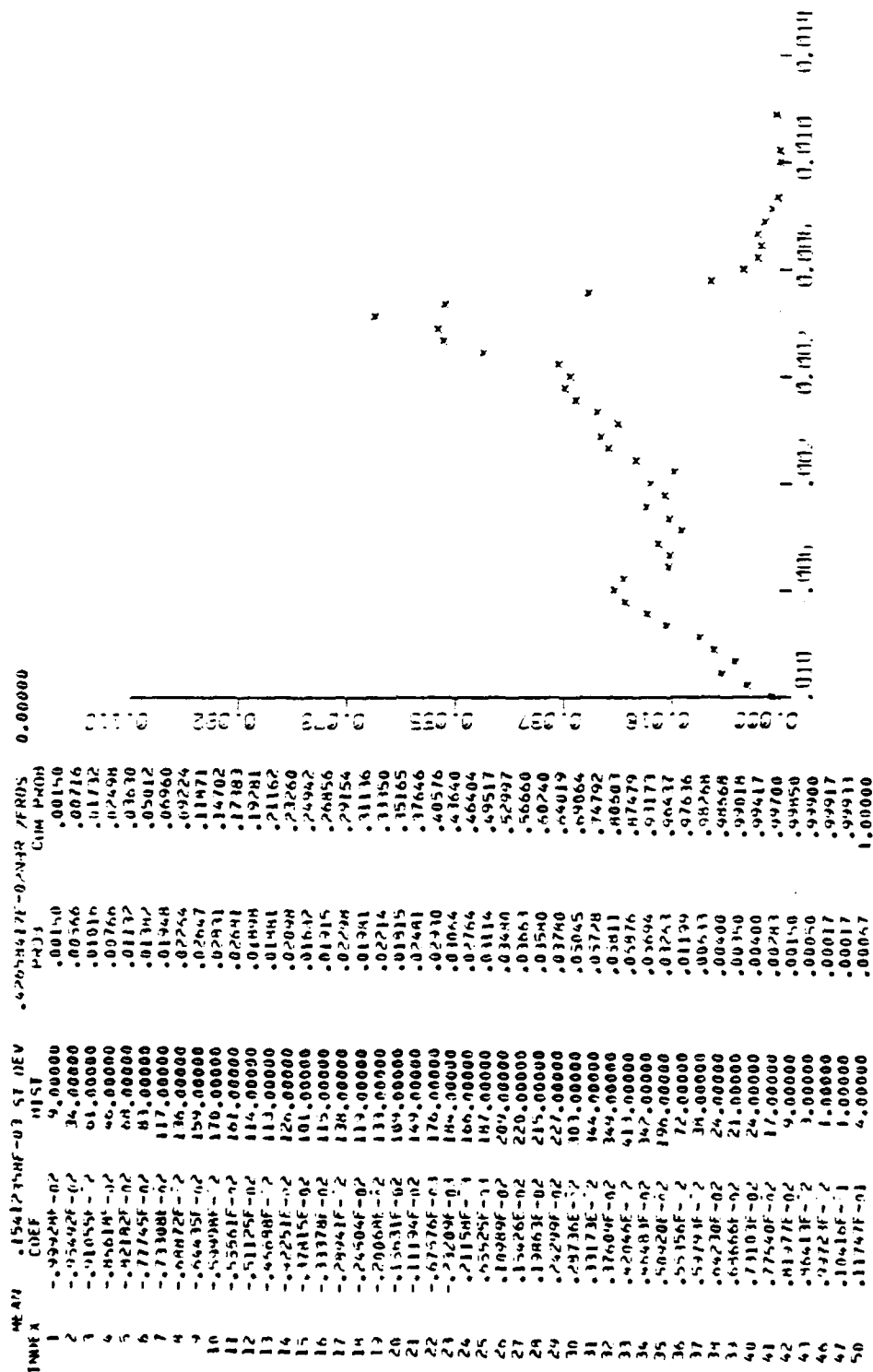


TABLE 3-14. DISTRIBUTION FUNCTION OF THE CROSS-CORRELATION SURFACE OF THE 1-mrad AND 2-mrad
SENSOR FOV MASK AND THE TARGET AND BACKGROUND SCENES (Sheet 20 of 30)

COMPOSITE OF 17 FILMS
CROSS CORRELATION
2 HR SENSOR FOV MASK 1000 FT
FAMS 11 AIRS 77 3-5 MR GRASS

INDEX	COEF	HIST	PMCH	CUM PMCH
45	-.21359E-01	1.00000	.00001	.00001
46	-.21156E-01	4.00000	.00004	.00005
47	-.20952E-01	6.00000	.00006	.00011
48	-.20748E-01	7.00000	.00007	.00018
49	-.20544E-01	6.00000	.00006	.00024
50	-.20340E-01	5.00000	.00005	.00029
51	-.20136E-01	6.00000	.00006	.00034
52	-.19932E-01	2.00000	.00002	.00036
53	-.19728E-01	3.00000	.00003	.00039
54	-.19524E-01	3.00000	.00003	.00042
55	-.19320E-01	4.00000	.00004	.00046
56	-.19116E-01	2.00000	.00002	.00048
57	-.18912E-01	2.00000	.00002	.00050
58	-.18708E-01	1.00000	.00001	.00051
59	-.18504E-01	2.00000	.00002	.00053
60	-.18300E-01	1.00000	.00001	.00054
61	-.18096E-01	2.00000	.00002	.00056
62	-.17892E-01	7.00000	.00007	.00061
63	-.17688E-01	4.00000	.00004	.00067
64	-.17484E-01	10.00000	.00010	.00076
65	-.17280E-01	7.00000	.00007	.00083
66	-.17076E-01	8.00000	.00008	.00091
67	-.16872E-01	10.00000	.00010	.00101
68	-.16668E-01	4.00000	.00004	.00110
69	-.16464E-01	6.00000	.00006	.00116
70	-.16260E-01	1.00000	.00001	.00117
71	-.16056E-01	2.00000	.00002	.00119
72	-.15852E-01	3.00000	.00003	.00121
73	-.15648E-01	5.00000	.00005	.00126
74	-.15444E-01	5.00000	.00005	.00131
75	-.15240E-01	2.00000	.00002	.00133
76	-.15036E-01	4.00000	.00004	.00137
77	-.14832E-01	1.00000	.00001	.00139
78	-.14628E-01	2.00000	.00002	.00140
79	-.14424E-01	2.00000	.00002	.00142
80	-.14220E-01	3.00000	.00003	.00145
81	-.14016E-01	6.00000	.00006	.00151
82	-.13812E-01	2.00000	.00002	.00153
83	-.13608E-01	4.00000	.00004	.00157
84	-.13404E-01	3.00000	.00003	.00160
85	-.13200E-01	4.00000	.00004	.00167
86	-.12996E-01	1.00000	.00001	.00168
87	-.12792E-01	3.00000	.00003	.00171
88	-.12588E-01	4.00000	.00004	.00175
89	-.12384E-01	2.00000	.00002	.00177
90	-.12180E-01	5.00000	.00005	.00182
91	-.11976E-01	4.00000	.00004	.00186
92	-.11772E-01	2.00000	.00002	.00188
93	-.11568E-01	3.00000	.00003	.00191
94	-.11364E-01	4.00000	.00004	.00194
95	-.11160E-01	9.00000	.00009	.00200
96	-.10956E-01	2.00000	.00002	.00202
97	-.10752E-01	1.00000	.00001	.00204
98	-.10548E-01	1.00000	.00001	.00207
99	-.10344E-01	6.00000	.00006	.00211

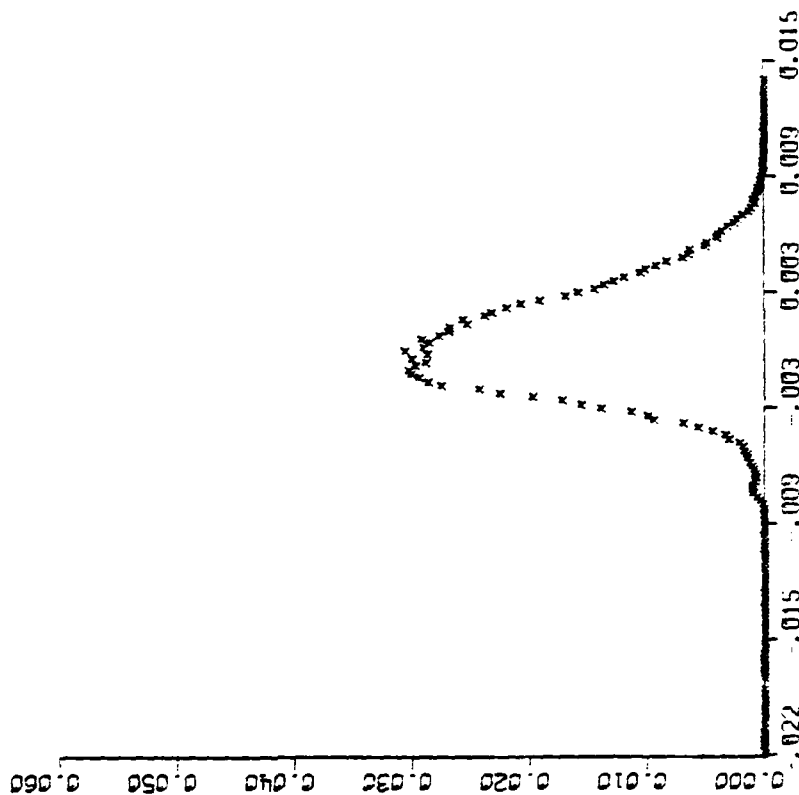


TABLE 3-14. DISTRIBUTION FUNCTION OF THE CROSS-CORRELATION SURFACE OF THE 1-mrad AND 2-mrad
SENSOR FOV MASK AND THE TARGET AND BACKGROUND SCENES (Sheet 21 of 30)

INDEX	COEF	HIST	P4004	CUM PROB
21	-.150321-02	2.000000	.00002	.00214
26	-.911998-02	9.000000	.00009	.00223
25	-.113646-02	5.000000	.00005	.00224
24	-.095116-02	10.000000	.00010	.00234
23	-.016971-02	6.000000	.00006	.00244
22	-.055631-02	3.000000	.00003	.00247
21	-.013629-02	15.000000	.00015	.00262
20	-.011396-02	24.000000	.00024	.00285
19	-.793021-02	37.000000	.00036	.00321
18	-.713281-02	73.000000	.00071	.00393
17	-.752947-02	104.000000	.00102	.00495
16	-.732608-02	114.000000	.00112	.00606
15	-.712271-02	108.000000	.00106	.00712
14	-.691131-02	91.000000	.00099	.00801
13	-.671591-02	80.000000	.00078	.00880
12	-.651258-02	96.000000	.00094	.00974
11	-.630928-02	107.000000	.00105	.01078
10	-.610581-02	111.000000	.00109	.01187
9	-.590247-02	130.000000	.00127	.01314
8	-.569901-02	155.000000	.00152	.01466
7	-.549571-02	168.000000	.00165	.01631
6	-.529231-02	184.000000	.00180	.01811
5	-.508891-02	190.000000	.00186	.01997
4	-.488551-02	226.000000	.00221	.02218
3	-.468221-02	315.000000	.00309	.02527
2	-.447881-02	349.000000	.00342	.02869
1	-.427541-02	459.000000	.00450	.03318
1	-.407201-02	581.000000	.00569	.03887
3	-.386871-02	967.000000	.00704	.04591
4	-.366531-02	1023.000000	.0082	.05539
5	-.346191-02	1164.000000	.01002	.06541
6	-.325851-02	1428.000000	.01140	.07681
7	-.305521-02	1606.000000	.01399	.09079
8	-.285181-02	1766.000000	.01573	.10652
9	-.264841-02	2020.000000	.01730	.12382
10	-.244501-02	2306.000000	.01978	.14360
11	-.224171-02	2491.000000	.02259	.16619
12	-.203831-02	2814.000000	.02440	.19058
13	-.183491-02	2932.000000	.02756	.21814
14	-.163151-02	3015.000000	.02872	.24686
15	-.142811-02	3083.000000	.02953	.27639
16	-.122481-02	3102.000000	.03070	.30659
17	-.102141-02	3095.000000	.03148	.33697
18	-.081801-02	2954.000000	.02982	.36679
19	-.061461-02	3071.000000	.02893	.39572
20	-.041121-02	2942.000000	.02801	.42580
21	-.020781-02	3132.000000	.02688	.45661
22	-.000441-02	2971.000000	.02410	.48529
23	.019851-02	2917.000000	.02410	.51439
24	.039221-02	2996.000000	.02410	.54296
25	.058601-02	2439.000000	.02410	.57228
26	.077971-02	2754.000000	.02410	.60094
27	.097351-02	2742.000000	.02410	.62706
28	.116731-02	2597.000000	.02410	.65191
29	.136111-02	2635.000000	.02410	.67915
30	.155491-02	2445.000000	.02410	.70516
31	.174871-02	2376.000000	.02410	.72910
32	.194251-02	2750.000000	.02410	.75218
				.77461

TABLE 3-14. DISTRIBUTION FUNCTION OF THE CROSS-CORRELATION SURFACE OF THE 1-mrad AND 2-mrad
SENSOR FOV MASK AND THE TARGET AND BACKGROUND SCENES (Sheet 22 of 30)

DATA	COEF	MEAN	STD	PROB	CUM PROB
33	.22126E-02	2125.00000	.02041	.79522	
34	.24160E-02	1959.00000	.01919	.81441	
35	.26194E-02	1778.00000	.01702	.83143	
36	.28227E-02	1627.00000	.01544	.84717	
37	.30261E-02	1482.00000	.01451	.86188	
38	.32295E-02	1400.00000	.01371	.87559	
39	.34329E-02	1315.00000	.01288	.88847	
40	.36362E-02	1223.00000	.01198	.90045	
41	.38396E-02	1086.00000	.01064	.91109	
42	.40430E-02	1045.00000	.01023	.92132	
43	.42464E-02	954.00000	.00934	.93067	
44	.44497E-02	857.00000	.00839	.93906	
45	.46531E-02	774.00000	.00703	.94609	
46	.48565E-02	665.00000	.00651	.95261	
47	.50599E-02	658.00000	.00644	.95905	
48	.52632E-02	518.00000	.00507	.96412	
49	.54666E-02	512.00000	.00501	.96914	
50	.56700E-02	419.00000	.00410	.97324	
1	.58734E-02	411.00000	.00403	.97727	
2	.60767E-02	375.00000	.00367	.98044	
3	.62801E-02	325.00000	.00318	.98412	
4	.64835E-02	268.00000	.00262	.98675	
5	.66869E-02	234.00000	.00229	.98904	
6	.68902E-02	199.00000	.00195	.99099	
7	.70936E-02	136.00000	.00135	.99234	
8	.72970E-02	118.00000	.00116	.99350	
9	.75004E-02	96.00000	.00094	.99444	
10	.77037E-02	97.00000	.00095	.99519	
11	.79071E-02	78.00000	.00076	.99615	
12	.81105E-02	71.00000	.00070	.99685	
13	.83139E-02	60.00000	.00059	.99743	
14	.85172E-02	34.00000	.00037	.99781	
15	.87206E-02	45.00000	.00044	.99825	
16	.89240E-02	30.00000	.00029	.99854	
17	.91274E-02	24.00000	.00024	.99878	
18	.93307E-02	19.00000	.00019	.99896	
19	.95341E-02	12.00000	.00012	.99908	
20	.97375E-02	17.00000	.00017	.99925	
21	.99409E-02	9.00000	.00009	.99933	
22	.10164E-01	8.00000	.00004	.99941	
23	.10368E-01	9.00000	.00009	.99950	
24	.10571E-01	4.00000	.00004	.99954	
25	.10774E-01	11.00000	.00011	.99965	
26	.10978E-01	1.00000	.00003	.99968	
27	.11181E-01	5.00000	.00005	.99973	
28	.11384E-01	2.00000	.00002	.99975	
29	.11588E-01	8.00000	.00004	.99982	
30	.11791E-01	2.00000	.00002	.99984	
31	.11995E-01	3.00000	.00003	.99987	
32	.12198E-01	3.00000	.00003	.99990	
33	.12401E-01	1.00000	.00001	.99991	
34	.12605E-01	1.00000	.00001	.99992	
35	.12809E-01	1.00000	.00001	.99993	
36	.13012E-01	1.00000	.00001	.99994	
37	.13215E-01	3.00000	.00003	.99997	
38	.13418E-01	1.00000	.00001	.99998	
39	.13621E-01	1.00000	.00001	.99999	
40	.13824E-01	1.00000	.00001	.99999	
41	.14027E-01	1.00000	.00001	1.00000	

.279202844 -02

CUMULATIVE MEAN AND STANDARD DEVIATION .152477491 -03

TABLE 3-14. DISTRIBUTION FUNCTION OF THE CROSS-CORRELATION SURFACE OF THE 1-mrad AND 2-mrad
SENSOR FOV MASK AND THE TARGET AND BACKGROUND SCENES (Sheet 23 of 30)

COMPOSITE OF 16 FILES
CROSS CORRELATION
2-MR SENSOR FOV MASK 1000 FT
1-MS 1 AND 11 3-5 WD FILES

INDEX	LOEF	HIST	P.M.H	CUM PROB
42	-5.50030E-02	5.00000	.00002	.00002
41	-5.7493E-02	4.00000	.00002	.00004
39	-5.5560E-02	2.00000	.00001	.00005
38	-5.6664E-02	4.00000	.00002	.00007
37	-5.3721E-02	2.00000	.00001	.00008
36	-5.2779E-02	6.00000	.00003	.00011
35	-5.1015E-02	3.00000	.00001	.00013
34	-5.0092E-02	4.00000	.00002	.00015
33	-4.9948E-02	2.00000	.00001	.00016
32	-4.9058E-02	6.00000	.00003	.00019
31	-4.8062E-02	12.00000	.00006	.00024
30	-4.7119E-02	8.00000	.00004	.00028
29	-4.6176E-02	14.00000	.00007	.00035
28	-4.5233E-02	11.00000	.00005	.00041
27	-4.4290E-02	13.00000	.00006	.00047
26	-4.3347E-02	24.00000	.00014	.00061
25	-4.2404E-02	14.00000	.00007	.00068
24	-4.1461E-02	25.00000	.00012	.00080
23	-4.0518E-02	51.00000	.00025	.00105
22	-3.9575E-02	59.00000	.00029	.00134
21	-3.8632E-02	80.00000	.00049	.00173
20	-3.7689E-02	130.00000	.00064	.00216
19	-3.6746E-02	160.00000	.00078	.00261
18	-3.5803E-02	193.00000	.00094	.00310
17	-3.4860E-02	206.00000	.00101	.00355
16	-3.3917E-02	255.00000	.00125	.00435
15	-3.2974E-02	319.00000	.00156	.00541
14	-3.2031E-02	347.00000	.00170	.00661
13	-3.1088E-02	396.00000	.00194	.00815
12	-3.0145E-02	473.00000	.00232	.01066
11	-2.9202E-02	497.00000	.00243	.01530
10	-2.8259E-02	592.00000	.00290	.01919
9	-2.7316E-02	619.00000	.00303	.02222
8	-2.6373E-02	729.00000	.00357	.02579
7	-2.5430E-02	848.00000	.00415	.02994
6	-2.4487E-02	934.00000	.00457	.03452
5	-2.3544E-02	1109.00000	.00544	.03994
4	-2.2601E-02	1298.00000	.00516	.04510
3	-2.1657E-02	1512.00000	.00740	.05250
2	-2.0714E-02	1547.00000	.00757	.06104
1	-1.9771E-02	1796.00000	.00879	.06987
1	-1.8828E-02	2078.00000	.01017	.08004
2	-1.7885E-02	2192.00000	.01074	.09077
3	-1.6942E-02	2565.00000	.01266	.10423
4	-1.6000E-02	2894.00000	.01462	.11715
5	-1.5058E-02	3166.00000	.01500	.13255
6	-1.4115E-02	3594.00000	.01766	.15041
7	-1.3173E-02	4038.00000	.01977	.17018
8	-1.2230E-02	4560.00000	.02232	.19250
9	-1.1287E-02	4874.00000	.02368	.21638
10	-1.0344E-02	5222.00000	.02556	.24194
11	-9.399E-03	5513.00000	.02694	.26911
12	-8.4547E-03	5777.00000	.02798	.29711
13	-7.5094E-03	5921.00000	.02879	.32590

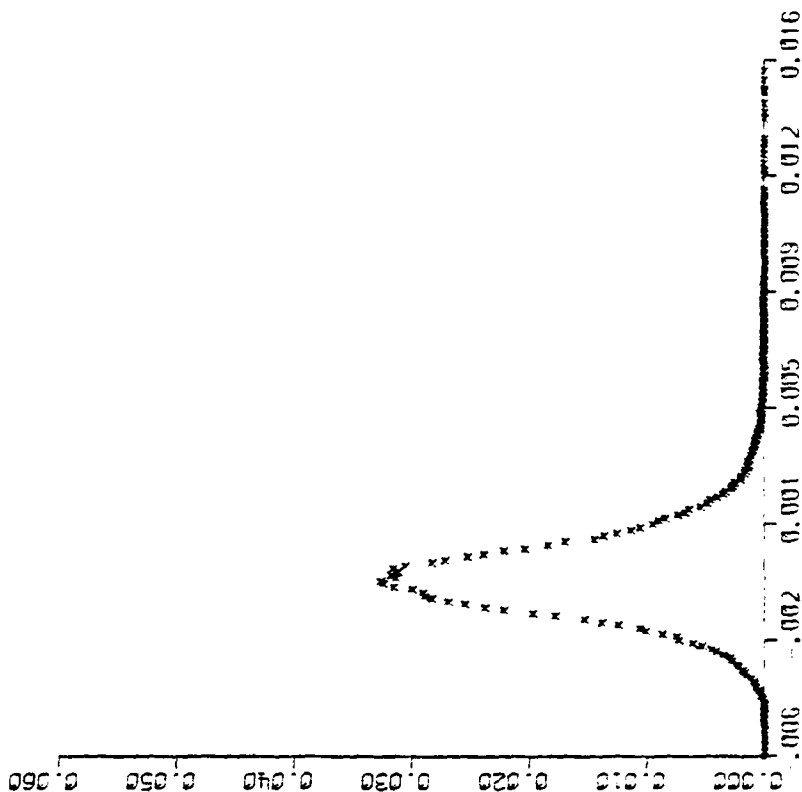


TABLE 3-14. DISTRIBUTION FUNCTION OF THE CROSS-CORRELATION SURFACE OF THE 1-mrad AND 2-mrad
SENSOR FOV MASK AND THE TARGET AND BACKGROUND SCENES (Sheet 24 of 30)

LINE #	CURP	WIST	P-000	CUM PROB
14	-0.5110-03	5457.00000	.02716	.35566
15	-0.506471-03	6155.00000	.01013	.00559
16	-0.502571-03	6471.00000	.01168	.61727
17	-0.498271-03	6652.00000	.03256	.64963
18	-0.493968-03	6704.00000	.01284	.66267
19	-0.489668-03	6942.00000	.01151	.51420
20	-0.485358-03	6510.00000	.01147	.54607
21	-0.4810511-04	6400.00000	.01133	.57740
22	-0.476741-03	6484.00000	.01174	.60916
23	-0.472431-04	6265.00000	.03067	.63981
24	-0.468121-03	5795.00000	.02417	.66814
25	-0.463811-03	5582.00000	.02733	.69550
26	-0.459501-03	5184.00000	.02538	.72048
27	-0.455191-03	4896.00000	.02397	.74485
28	-0.450881-03	4528.00000	.02241	.76716
29	-0.446571-03	4187.00000	.02050	.78766
30	-0.442261-03	3781.00000	.01851	.80616
31	-0.437951-03	3485.00000	.01706	.82322
32	-0.433641-03	2988.00000	.01563	.83785
33	-0.429331-02	2814.00000	.01378	.85161
34	-0.425021-02	2586.00000	.01266	.86428
35	-0.420711-02	2342.00000	.01166	.87575
36	-0.416401-02	2180.00000	.01067	.88642
37	-0.412091-02	1958.00000	.00958	.89601
38	-0.407781-02	1861.00000	.00911	.90512
39	-0.403471-02	1713.00000	.00853	.91365
40	-0.399161-02	1513.00000	.00741	.92105
41	-0.394851-02	1392.00000	.00681	.92787
42	-0.390541-02	1321.00000	.00647	.93636
43	-0.386231-02	1115.00000	.00566	.94379
44	-0.381921-02	992.00000	.00486	.94465
45	-0.377611-02	951.00000	.00466	.94931
46	-0.373301-02	834.00000	.00411	.95361
47	-0.368991-02	735.00000	.00360	.95701
48	-0.364681-02	704.00000	.00345	.96046
49	-0.360371-02	598.00000	.00293	.96338
50	-0.356061-02	582.00000	.00285	.96623
1	-0.351751-02	529.00000	.00259	.96882
2	-0.347441-02	432.00000	.00211	.97094
3	-0.343131-02	429.00000	.00210	.97304
4	-0.338821-02	371.00000	.00182	.97585
5	-0.334511-02	347.00000	.00170	.97855
6	-0.330201-02	298.00000	.00166	.97801
7	-0.325891-02	296.00000	.00155	.97946
8	-0.321581-02	309.00000	.00151	.98097
9	-0.317271-02	271.00000	.00133	.98210
10	-0.312961-02	246.00000	.00120	.98350
11	-0.308651-02	229.00000	.00112	.98462
12	-0.304341-02	233.00000	.00114	.98576
13	-0.300031-02	202.00000	.00099	.98675
14	-0.295721-02	193.00000	.00094	.98770
15	-0.291411-02	141.00000	.00080	.98859
16	-0.287101-02	173.00000	.00085	.98944
17	-0.282791-02	141.00000	.00074	.99013
18	-0.278481-02	137.00000	.00067	.99080
19	-0.274171-02	123.00000	.00060	.99149
20	-0.269861-02	102.00000	.00050	.99218
21	-0.265551-02	97.00000	.00047	.99284
22	-0.261241-02	82.00000	.00040	.99348

TABLE 3-14. DISTRIBUTION FUNCTION OF THE CROSS-CORRELATION SURFACE OF THE 1-mrad AND 2-mrad
SENSOR FOV MASK AND THE TARGET AND BACKGROUND SCENES (Sheet 25 of 30)

INDEX	CORR	MIST	P CORR	CIPR PRDH
23	.091271-02	72.00000	.00015	.99111
24	.090711-02	105.00000	.00051	.99165
25	.090141-02	60.00000	.00033	.99190
26	.089571-02	60.00000	.00029	.99277
27	.089001-02	45.00000	.00022	.99449
28	.088431-02	53.00000	.00026	.99675
29	.087861-02	45.00000	.00022	.99697
30	.087291-02	49.00000	.00024	.99521
31	.086721-02	38.00000	.00019	.99540
32	.086151-02	31.00000	.00015	.99555
33	.085581-02	44.00000	.00023	.99579
34	.085011-02	39.00000	.00019	.99598
35	.084441-02	33.00000	.00016	.99614
36	.083871-02	28.00000	.00010	.99637
37	.083301-02	20.00000	.00014	.99627
38	.082731-02	34.00000	.00017	.99654
39	.082161-02	29.00000	.00014	.99668
40	.081591-02	28.00000	.00014	.99682
41	.081021-02	28.00000	.00014	.99696
42	.080451-02	24.00000	.00014	.99710
43	.079881-02	31.00000	.00015	.99725
44	.079311-02	19.00000	.00009	.99734
45	.078741-02	26.00000	.00011	.99747
46	.078171-02	19.00000	.00009	.99756
47	.077601-02	19.00000	.00009	.99766
48	.077031-02	28.00000	.00014	.99779
49	.076461-02	21.00000	.00010	.99790
50	.075891-02	17.00000	.00004	.99798
51	.075321-02	20.00000	.00010	.99808
52	.074751-02	14.00000	.00007	.99814
53	.074181-02	16.00000	.00007	.99821
54	.073611-02	16.00000	.00004	.99829
55	.073041-02	14.00000	.00007	.99836
56	.072471-02	15.00000	.00007	.99843
57	.071901-02	16.00000	.00004	.99851
58	.071331-02	9.00000	.00004	.99856
59	.070761-02	21.00000	.00010	.99866
60	.070191-02	11.00000	.00004	.99871
61	.069621-02	15.00000	.00007	.99879
62	.069051-02	15.00000	.00007	.99886
63	.068481-02	13.00000	.00006	.99892
64	.067911-02	14.00000	.00007	.99899
65	.067341-02	13.00000	.00006	.99906
66	.066771-02	13.00000	.00006	.99912
67	.066201-02	9.00000	.00004	.99916
68	.065631-02	9.00000	.00004	.99921
69	.065061-02	11.00000	.00005	.99926
70	.064491-02	6.00000	.00003	.99929
71	.063921-02	7.00000	.00003	.99932
72	.063351-02	6.00000	.00003	.99935
73	.062781-02	9.00000	.00004	.99940
74	.062211-02	5.00000	.00002	.99946
75	.061641-02	1.00000	.00000	.99951
76	.061071-02	9.00000	.00004	.99957
77	.060501-02	4.00000	.00002	.99964
78	.059931-02	6.00000	.00003	.99972
79	.059361-01	7.00000	.00003	.99975
80	.058791-01	5.00000	.00002	.99978
81	.058221-01	6.00000	.00003	.99981

TABLE 3-14. DISTRIBUTION FUNCTION OF THE CROSS-CORRELATION SURFACE OF THE 1-mrad AND 2-mrad
SENSOR FOV MASK AND THE TARGET AND BACKGROUND SCENES (Sheet 26 of 30)

INDEX	CORR	HIST	P-TOT	CUM PROB
82	.103771-01	1.000000	.00001	.99962
83	.104711-01	5.000000	.00002	.99965
84	.105651-01	1.000000	.00001	.99966
85	.106601-01	4.000000	.00002	.99968
86	.107541-01	1.000000	.00001	.99970
87	.108481-01	7.000000	.00003	.99973
88	.109421-01	6.000000	.00003	.99976
89	.110371-01	3.000000	.00001	.99977
90	.111311-01	2.000000	.00001	.99978
91	.112251-01	1.000000	.00000	.99979
92	.113201-01	7.000000	.00003	.99982
93	.114141-01	1.000000	.00000	.99983
94	.115081-01	2.000000	.00001	.99984
95	.116031-01	2.000000	.00001	.99985
96	.116971-01	2.000000	.00001	.99986
97	.117911-01	1.000000	.00000	.99986
98	.118861-01	1.000000	.00000	.99987
99	.119801-01	2.000000	.00001	.99988
100	.120741-01	1.000000	.00001	.99989
101	.121681-01	4.000000	.00002	.99991
102	.122621-01	1.000000	.00000	.99992
103	.123561-01	1.000000	.00000	.99992
104	.124501-01	2.000000	.00001	.99993
105	.125441-01	1.000000	.00000	.99994
106	.126381-01	1.000000	.00000	.99994
107	.127321-01	2.000000	.00001	.99995
108	.128261-01	2.000000	.00001	.99996
109	.129201-01	1.000000	.00000	.99997
110	.130141-01	1.000000	.00000	.99997
111	.131081-01	2.000000	.00001	.99997
112	.132021-01	2.000000	.00001	.99998
113	.132961-01	1.000000	.00000	.99999
114	.133901-01	1.000000	.00000	.99999
115	.134841-01	2.000000	.00001	1.00000
116	.135781-01	1.000000	.00000	1.00000
117	.136721-01	1.000000	.00000	1.00000
118	.137661-01	1.000000	.00000	1.00000
119	.138601-01	1.000000	.00000	1.00000
120	.139541-01	1.000000	.00000	1.00000
121	.140481-01	1.000000	.00000	1.00000
122	.141421-01	1.000000	.00000	1.00000
123	.142361-01	1.000000	.00000	1.00000
124	.143301-01	1.000000	.00000	1.00000
125	.144241-01	1.000000	.00000	1.00000
126	.145181-01	1.000000	.00000	1.00000
127	.146121-01	1.000000	.00000	1.00000
128	.147061-01	1.000000	.00000	1.00000
129	.148001-01	1.000000	.00000	1.00000
130	.148941-01	1.000000	.00000	1.00000
131	.149881-01	1.000000	.00000	1.00000
132	.150821-01	1.000000	.00000	1.00000
133	.151761-01	1.000000	.00000	1.00000
134	.152701-01	1.000000	.00000	1.00000
135	.153641-01	1.000000	.00000	1.00000
136	.154581-01	1.000000	.00000	1.00000
137	.155521-01	1.000000	.00000	1.00000
138	.156461-01	1.000000	.00000	1.00000
139	.157401-01	1.000000	.00000	1.00000
140	.158341-01	1.000000	.00000	1.00000
141	.159281-01	1.000000	.00000	1.00000
142	.160221-01	1.000000	.00000	1.00000
143	.161161-01	1.000000	.00000	1.00000
144	.162101-01	1.000000	.00000	1.00000
145	.163041-01	1.000000	.00000	1.00000
146	.163981-01	1.000000	.00000	1.00000
147	.164921-01	1.000000	.00000	1.00000
148	.165861-01	1.000000	.00000	1.00000
149	.166801-01	1.000000	.00000	1.00000
150	.167741-01	1.000000	.00000	1.00000
151	.168681-01	1.000000	.00000	1.00000
152	.169621-01	1.000000	.00000	1.00000
153	.170561-01	1.000000	.00000	1.00000
154	.171501-01	1.000000	.00000	1.00000
155	.172441-01	1.000000	.00000	1.00000
156	.173381-01	1.000000	.00000	1.00000
157	.174321-01	1.000000	.00000	1.00000
158	.175261-01	1.000000	.00000	1.00000
159	.176201-01	1.000000	.00000	1.00000
160	.177141-01	1.000000	.00000	1.00000
161	.178081-01	1.000000	.00000	1.00000
162	.179021-01	1.000000	.00000	1.00000
163	.180000	1.000000	.00000	1.00000
164	.180941-01	1.000000	.00000	1.00000
165	.181881-01	1.000000	.00000	1.00000
166	.182821-01	1.000000	.00000	1.00000
167	.183761-01	1.000000	.00000	1.00000
168	.184701-01	1.000000	.00000	1.00000
169	.185641-01	1.000000	.00000	1.00000
170	.186581-01	1.000000	.00000	1.00000
171	.187521-01	1.000000	.00000	1.00000
172	.188461-01	1.000000	.00000	1.00000
173	.189401-01	1.000000	.00000	1.00000
174	.190341-01	1.000000	.00000	1.00000
175	.191281-01	1.000000	.00000	1.00000
176	.192221-01	1.000000	.00000	1.00000
177	.193161-01	1.000000	.00000	1.00000
178	.194101-01	1.000000	.00000	1.00000
179	.195041-01	1.000000	.00000	1.00000
180	.195981-01	1.000000	.00000	1.00000
181	.196921-01	1.000000	.00000	1.00000
182	.197861-01	1.000000	.00000	1.00000
183	.198801-01	1.000000	.00000	1.00000
184	.199741-01	1.000000	.00000	1.00000
185	.200681-01	1.000000	.00000	1.00000
186	.201621-01	1.000000	.00000	1.00000
187	.202561-01	1.000000	.00000	1.00000
188	.203501-01	1.000000	.00000	1.00000
189	.204441-01	1.000000	.00000	1.00000
190	.205381-01	1.000000	.00000	1.00000
191	.206321-01	1.000000	.00000	1.00000
192	.207261-01	1.000000	.00000	1.00000
193	.208201-01	1.000000	.00000	1.00000
194	.209141-01	1.000000	.00000	1.00000
195	.210081-01	1.000000	.00000	1.00000
196	.211021-01	1.000000	.00000	1.00000
197	.211961-01	1.000000	.00000	1.00000
198	.212901-01	1.000000	.00000	1.00000
199	.213841-01	1.000000	.00000	1.00000
200	.214781-01	1.000000	.00000	1.00000
201	.215721-01	1.000000	.00000	1.00000
202	.216661-01	1.000000	.00000	1.00000
203	.217601-01	1.000000	.00000	1.00000
204	.218541-01	1.000000	.00000	1.00000
205	.219481-01	1.000000	.00000	1.00000
206	.220421-01	1.000000	.00000	1.00000
207	.221361-01	1.000000	.00000	1.00000
208	.222301-01	1.000000	.00000	1.00000
209	.223241-01	1.000000	.00000	1.00000
210	.224181-01	1.000000	.00000	1.00000
211	.225121-01	1.000000	.00000	1.00000
212	.226061-01	1.000000	.00000	1.00000
213	.227001-01	1.000000	.00000	1.00000
214	.227941-01	1.000000	.00000	1.00000
215	.228881-01	1.000000	.00000	1.00000
216	.229821-01	1.000000	.00000	1.00000
217	.230761-01	1.000000	.00000	1.00000
218	.231701-01	1.000000	.00000	1.00000
219	.232641-01	1.000000	.00000	1.00000
220	.233581-01	1.000000	.00000	1.00000
221	.234521-01	1.000000	.00000	1.00000
222	.235461-01	1.000000	.00000	1.00000
223	.236401-01	1.000000	.00000	1.00000
224	.237341-01	1.000000	.00000	1.00000
225	.238281-01	1.000000	.00000	1.00000
226	.239221-01	1.000000	.00000	1.00000
227	.240161-01	1.000000	.00000	1.00000
228	.241101-01	1.000000	.00000	1.00000
229	.242041-01	1.000000	.00000	1.00000
230	.242981-01	1.000000	.00000	1.00000
231	.243921-01	1.000000	.00000	1.00000
232	.244861-01	1.000000	.00000	1.00000
233	.245801-01	1.000000	.00000	1.00000
234	.246741-01	1.000000	.00000	1.00000
235	.247681-01	1.000000	.00000	1.00000
236	.248621-01	1.000000	.00000	1.00000
237	.249561-01	1.000000	.00000	1.00000
238	.250501-01	1.000000	.00000	1.00000
239	.251441-01	1.000000	.00000	1.00000
240	.252381-01	1.000000	.00000	1.00000
241	.253321-01	1.000000	.00000	1.00000
242	.254261-01	1.000000	.00000	1.00000
243	.255201-01	1.000000	.00000	1.00000
244	.256141-01	1.000000	.00000	1.00000
245	.257081-01	1.000000	.00000	1.00000
246	.258021-01	1.000000	.00000	1.00000
247	.258961-01	1.000000	.00000	1.00000
248	.259901-01	1.000000	.00000	1.00000
249	.260841-01	1.000000	.00000	1.00000
250	.261781-01	1.000000	.00000	1.00000
251	.262721-01	1.000000	.00000	1.00000
252	.263661-01	1.000000	.00000	1.00000
253	.264601-01	1.000000	.00000	1.00000
254	.265541-01	1.000000	.00000	1.00000
255	.266481-01	1.000000	.00000	1.00000
256	.267421-01	1.000000	.00000	1.00000
257	.268361-01	1.000000	.00000	1.00000
258	.269301-01	1.000000	.00000	1.00000
259	.270241-01	1.000000	.00000	1.00000
260	.271181-01	1.000000	.00000	1.00000
261	.272121-01	1.000000	.00000	1.00000
262	.273061-01	1.000000	.00000	1.00000
263	.274001-01	1.000000	.00000	1.00000
264	.274941-01	1.000000	.00000	1.00000
265	.275881-01	1.000000	.00000	1.00000
266	.276821-01	1.000000	.00000	1.00000
267	.277761-01	1.000000	.00000	1.00000
268	.278701-01	1.000000	.00000	1.00000
269	.279641-01	1.000000	.00000	1.00000
270	.280581-01	1.000000	.00000	1.00000
271	.281521-01	1.000000	.00000	1.00000
272	.282461-01	1.000000	.00000	1.00000
273	.283401-01	1.000000	.00000	1.00000
274	.284341-01	1.000000	.00000	1.00000
275	.285281-01	1.000000	.00000	1.00000
276	.286221-01	1.000000	.00000	1.00000
277	.287161-01	1.000000	.00000	1.00000
278	.288101-01	1.000000	.00000	1.00000
279	.289041-01	1.000000	.00000	1.00000
280	.290000	1.000000	.	

TABLE 3-14. DISTRIBUTION FUNCTION OF THE CROSS-CORRELATION SURFACE OF THE 1-mrad AND 2-mrad
SENSOR FOV MASK AND THE TARGET AND BACKGROUND SCENES (Sheet 27 of 30)

COMPOSITE OF 10 FILES
CROSS CORRELATION
2 MM SENSOR FOV MASK 1000 FT
FADS A AUG 77 3-5 AM ASPHALT ROADS

INDEX	CODE	HIST	PHUM	GUM PHUM
1	-105797-01	10.00000	.00017	.00017
2	-101910-01	7.00000	.00012	.00029
3	-990347-02	11.00000	.00018	.00047
4	-941598-02	41.00000	.00068	.00115
5	-941598-02	69.00000	.00115	.00229
6	-907431-02	95.00000	.00158	.00387
7	-864081-02	159.00000	.00264	.00651
8	-825328-02	281.00000	.00467	.01118
9	-786578-02	310.00000	.00515	.01631
10	-747411-02	366.00000	.00608	.02240
11	-709058-02	472.00000	.00784	.03024
12	-670308-02	679.00000	.01128	.04152
13	-631545-02	1116.00000	.01853	.06005
14	-592797-02	1400.00000	.02325	.08330
15	-554034-02	1477.00000	.02453	.10783
16	-515288-02	1536.00000	.02551	.13334
17	-476528-02	1670.00000	.02441	.15775
18	-437771-02	1643.00000	.02129	.18504
19	-399011-02	1638.00000	.02120	.21224
20	-360261-02	1734.00000	.02880	.24104
21	-321508-02	1739.00000	.02880	.26992
22	-282758-02	1768.00000	.02916	.29928
23	-243997-02	2028.00000	.03368	.33296
24	-205241-02	2178.00000	.03617	.36913
25	-166487-02	2096.00000	.03641	.40194
26	-127731-02	2179.00000	.03619	.44013
27	-889711-01	2067.00000	.03633	.47449
28	-502151-01	1949.00000	.03717	.50681
29	-116601-01	1898.00000	.03152	.53835
30	-272951-03	2047.00000	.03400	.57234
31	-660511-01	2125.00000	.03529	.60763
32	-104811-02	1791.00000	.02974	.63738
33	-143562-02	1479.00000	.02656	.66194
34	-182321-02	1471.00000	.02643	.68637
35	-221071-02	1472.00000	.02545	.71081
36	-259431-02	1366.00000	.02269	.73350
37	-298581-02	1271.00000	.02114	.75464
38	-337341-02	1090.00000	.01810	.77274
39	-376091-02	827.00000	.01773	.78644
40	-414851-02	717.00000	.01191	.79839
41	-453601-02	586.00000	.00970	.80812
42	-492361-02	584.00000	.00884	.81782
43	-531111-02	532.00000	.00884	.82665
44	-569871-02	569.00000	.00865	.83610
45	-608621-02	584.00000	.00970	.84580
46	-647381-02	670.00000	.01113	.85621
47	-686131-02	834.00000	.01185	.86731
48	-724891-02	907.00000	.01506	.87894
49	-763651-02	787.00000	.01310	.89094
50	-802401-02	765.00000	.01270	.90365
51	-841161-02	850.00000	.01012	.91676
52	-879911-02	837.00000	.01190	.92967
53	-918671-02	687.00000	.01141	.94307
54	-957421-02	650.00000	.01079	.95687

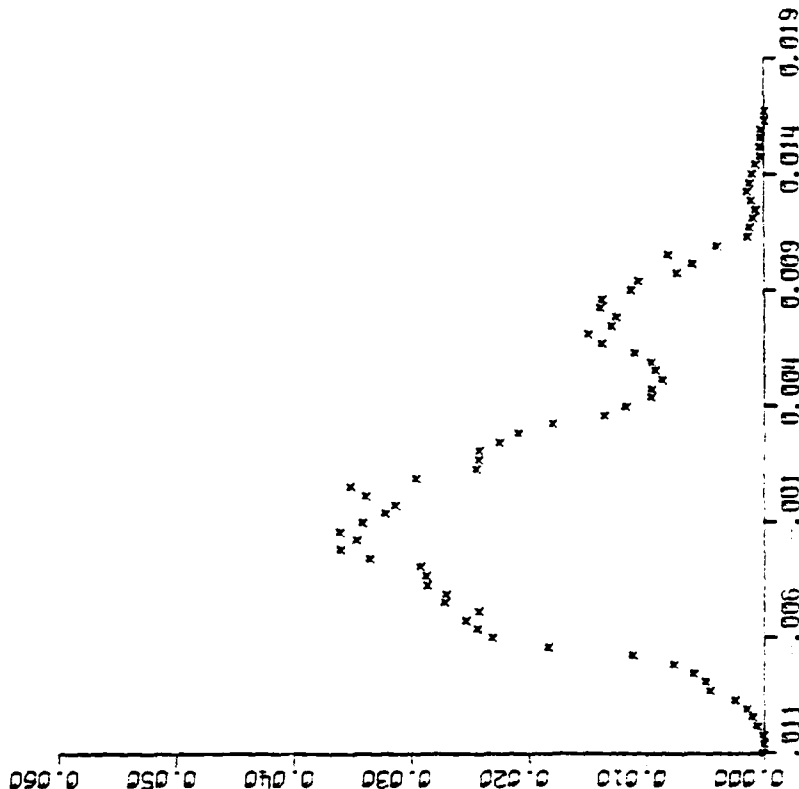


TABLE 3-14. DISTRIBUTION FUNCTION OF THE CROSS-CORRELATION SURFACE OF THE 1-mrad AND 2-mrad
SENSOR FOV MASK AND THE TARGET AND BACKGROUND SCENES (Sheet 28 of 30)

1-MR A	CORF	MEF	PMF	CUM PMF
1	.99618E-02	.449.00000	.00746	.96971
2	.10149E-01	372.00000	.00618	.97550
3	.10737E-01	502.00000	.00414	.98344
4	.11124E-01	644.00000	.00405	.98749
5	.11512E-01	88.00000	.00146	.98915
6	.11900E-01	78.00000	.00110	.99065
7	.12287E-01	59.00000	.00098	.99163
8	.12675E-01	49.00000	.00081	.99244
9	.13062E-01	75.00000	.00125	.99369
10	.13450E-01	88.00000	.00146	.99515
11	.13837E-01	80.00000	.00133	.99648
12	.14225E-01	66.00000	.00110	.99758
13	.14612E-01	50.00000	.00081	.99841
14	.15000E-01	22.00000	.00017	.99877
15	.15388E-01	26.00000	.00043	.99920
16	.15775E-01	23.00000	.00018	.99958
17	.16163E-01	1.00000	.00038	.99997
18	.16550E-01	1.00000	.00007	.99998
19	.16938E-01	1.00000	.00002	1.00000
COMPOSITE MEAN AND STANDARD DEVIATION				.32351628E-03
				.48188551E-02

TABLE 3-14. DISTRIBUTION FUNCTION OF THE CROSS-CORRELATION SURFACE OF THE 1-mrad AND 2-mrad
SENSOR FOV MASK AND THE TARGET AND BACKGROUND SCENES (Sheet 29 of 30)

COMPOSITE OF 5 FILES
CROSS CORRELATION
2 MR SENSOR FOV MASK 1000 FT
FAMS 8 AUG 77 3-5 MR BUILDINGS

INDEX	COEF	HIST	P-2-R	CUM PROR
1	-.12544E-01	9,00000	.00010	.00010
2	-.12098E-01	18,00000	.00050	.00060
3	-.11651E-01	19,00000	.00061	.00121
4	-.11205E-01	39,00000	.00110	.00231
5	-.10758E-01	49,00000	.00164	.00395
6	-.10312E-01	101,00000	.00271	.00666
7	-.98656E-02	206,00000	.00471	.01137
8	-.94191E-02	246,00000	.00698	.01835
9	-.89727E-02	292,00000	.00975	.02810
10	-.85263E-02	392,00000	.01309	.04119
11	-.80799E-02	476,00000	.01589	.05708
12	-.76335E-02	486,00000	.01623	.07331
13	-.71871E-02	510,00000	.01703	.09034
14	-.67407E-02	602,00000	.02010	.11044
15	-.62942E-02	714,00000	.02386	.13430
16	-.58478E-02	861,00000	.02845	.16275
17	-.54014E-02	996,00000	.03325	.19600
18	-.49550E-02	1058,00000	.03812	.23412
19	-.45086E-02	1134,00000	.04306	.27718
20	-.40622E-02	1192,00000	.04817	.32535
21	-.36158E-02	1192,00000	.05340	.37875
22	-.31693E-02	1172,00000	.05872	.43747
23	-.27229E-02	1055,00000	.06410	.50157
24	-.22765E-02	1040,00000	.06952	.57109
25	-.18301E-02	890,00000	.07491	.64600
26	-.13837E-02	646,00000	.08025	.72625
27	-.93728E-03	553,00000	.08566	.81191
28	-.49083E-03	475,00000	.09102	.90293
29	-.44453E-04	357,00000	.09621	.99914
30	-.17412E-02	222,00000	.00775	.00775
31	-.17412E-02	222,00000	.00775	.01550
32	-.26340E-02	186,00000	.00621	.02171
33	-.26340E-02	266,00000	.00741	.02912
34	-.30404E-02	222,00000	.00868	.03780
35	-.35268E-02	242,00000	.00941	.04721
36	-.37733E-02	261,00000	.01008	.05729
37	-.44137E-02	294,00000	.01102	.06831
38	-.49661E-02	310,00000	.01166	.07997
39	-.53125E-02	407,00000	.01362	.09359
40	-.57589E-02	485,00000	.01616	.11075
41	-.62053E-02	558,00000	.01963	.13038
42	-.65517E-02	704,00000	.02364	.15402
43	-.70442E-02	1010,00000	.02845	.18247
44	-.75666E-02	1150,00000	.03372	.21619
45	-.77010E-02	1051,00000	.03812	.25431
46	-.84174E-02	951,00000	.04306	.29737
47	-.89838E-02	848,00000	.04817	.34554
48	-.93102E-02	704,00000	.05340	.39894
49	-.97665E-02	555,00000	.05872	.45766
50	-.10223E-01	271,00000	.06410	.52176
51	-.10660E-01	171,00000	.06952	.59128

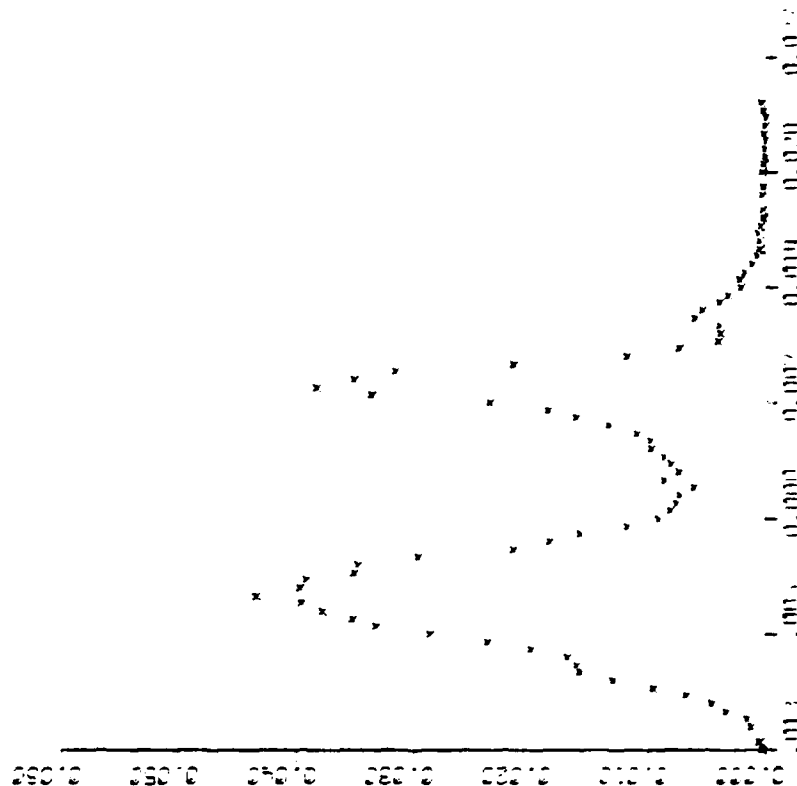


TABLE 3-14. DISTRIBUTION FUNCTION OF THE CROSS-CORRELATION SURFACE OF THE 1-mrad AND 2-mrad
SENSOR FOV MASK AND THE TARGET AND BACKGROUND SCENES (Sheet 30 of 30)

INDEX	CNEF	HIST	P204	CUM PRDH
2	.11116F-01	116.00000	.00197	.96291
3	.11562F-01	121.00000	.00404	.96685
4	.12009F-01	142.00000	.00608	.97292
5	.12455F-01	163.00000	.00544	.97817
6	.12902F-01	113.00000	.00197	.98234
7	.13348F-01	99.00000	.00131	.98564
8	.13794F-01	67.00000	.00224	.98788
9	.14241F-01	64.00000	.00227	.99015
10	.14687F-01	53.00000	.00177	.99192
11	.15134F-01	36.00000	.00120	.99312
12	.15580F-01	25.00000	.00083	.99396
13	.16026F-01	17.00000	.00063	.99459
14	.16473F-01	14.00000	.00060	.99519
15	.16919F-01	22.00000	.00073	.99591
16	.17366F-01	14.00000	.00047	.99639
17	.17812F-01	6.00000	.00020	.99659
18	.18259F-01	10.00000	.00033	.99691
19	.18705F-01	9.00000	.00030	.99723
20	.19151F-01	11.00000	.00037	.99760
21	.19598F-01	9.00000	.00030	.99790
22	.20044F-01	8.00000	.00027	.99816
23	.20491F-01	11.00000	.00037	.99853
24	.20937F-01	9.00000	.00030	.99883
25	.21384F-01	4.00000	.00013	.99897
26	.21830F-01	4.00000	.00013	.99910
27	.22276F-01	1.00000	.00003	.99911
28	.22723F-01	5.00000	.00017	.99930
29	.23169F-01	3.00000	.00010	.99940
30	.23615F-01	1.00000	.00003	.99943
31	.24062F-01	5.00000	.00017	.99960
32	.24508F-01	12.00000	.00040	1.00000
COMPOSITE MEAN AND STANDARD DEVIATION				.13519705E-03
				.65214435E-02

TABLE 3-15. DISTRIBUTION FUNCTION OF THE FILTERED CROSS-CORRELATION SURFACE

COMPOSITE OF 5 FILES
CROSS CORRELATION FILTERED
FAMS TARGET 1 11 47 23.9
FAMS A AUG 77 1-5 WB BUILDINGS

INDEX	COEF	MIST	PMJR	CUM PRUH
42	-.59456E+09	5.00000	.00023	.00023
41	-.57569E+09	14.00000	.00064	.00086
40	-.56682E+09	27.00000	.00123	.00209
39	-.55795E+09	27.00000	.00123	.00331
38	-.54908E+09	22.00000	.00100	.00431
37	-.54022E+09	21.00000	.00095	.00526
36	-.53135E+09	18.00000	.00082	.00608
35	-.52248E+09	15.00000	.00068	.00676
34	-.51361E+09	17.00000	.00077	.00753
33	-.50474E+09	38.00000	.00172	.00925
32	-.49587E+09	32.00000	.00145	.01071
31	-.48700E+09	36.00000	.00163	.01234
30	-.47813E+09	42.00000	.00191	.01425
29	-.46926E+09	53.00000	.00241	.01666
28	-.46039E+09	62.00000	.00281	.01947
27	-.45152E+09	49.00000	.00222	.02169
26	-.44265E+09	57.00000	.00259	.02428
25	-.43378E+09	48.00000	.00218	.02646
24	-.42491E+09	47.00000	.00213	.02859
23	-.41604E+09	42.00000	.00191	.03050
22	-.40718E+09	58.00000	.00263	.03313
21	-.39831E+09	39.00000	.00177	.03490
20	-.38944E+09	46.00000	.00209	.03699
19	-.38057E+09	42.00000	.00191	.03889
18	-.37170E+09	50.00000	.00227	.04116
17	-.36283E+09	69.00000	.00313	.04429
16	-.35396E+09	69.00000	.00313	.04742
15	-.34509E+09	63.00000	.00286	.05028
14	-.33622E+09	54.00000	.00245	.05273
13	-.32735E+09	49.00000	.00222	.05496
12	-.31848E+09	63.00000	.00286	.05782
11	-.30961E+09	67.00000	.00304	.06086
10	-.30074E+09	75.00000	.00340	.06426
9	-.29187E+09	63.00000	.00286	.06712
8	-.28300E+09	77.00000	.00349	.07061
7	-.27413E+09	63.00000	.00286	.07447
6	-.26527E+09	61.00000	.00277	.07824
5	-.25640E+09	59.00000	.00268	.08092
4	-.24753E+09	63.00000	.00286	.08378
3	-.23866E+09	86.00000	.00390	.08668
2	-.22979E+09	92.00000	.00418	.08986
1	-.22092E+09	119.00000	.00540	.09526
0	-.21205E+09	178.00000	.00808	.10334
2	-.20318E+09	174.00000	.00790	.11123
3	-.19431E+09	224.00000	.01017	.12148
4	-.18544E+09	210.00000	.00751	.13093
5	-.17657E+09	181.00000	.00821	.13914
6	-.16770E+09	237.00000	.01076	.14990
7	-.15883E+09	250.00000	.01115	.16124
8	-.14996E+09	246.00000	.01116	.17241
9	-.14109E+09	246.00000	.01130	.18357
10	-.13222E+09	296.00000	.01343	.19487
11	-.12335E+09	318.00000	.01441	.20630
12	-.11448E+09			.22274

TABLE 3-15. DISTRIBUTION FUNCTION OF THE FILTERED CROSS-CORRELATION SURFACE (Sheet 2 of 3)

INDEX	COEF	HIST	P-10H	CUM PRUH
13	-.11449E+09	443.00000	.02010	.24284
14	-.10562E+09	513.00000	.02619	.26703
15	-.96748E+08	576.00000	.02814	.29317
16	-.87079E+08	630.00000	.02859	.32176
17	-.79010E+08	543.00000	.02464	.36640
18	-.70140E+08	403.00000	.02192	.42832
19	-.61271E+08	443.00000	.02010	.48843
20	-.52402E+08	455.00000	.02065	.54998
21	-.43532E+08	419.00000	.01902	.62809
22	-.34663E+08	427.00000	.01918	.74747
23	-.25794E+08	403.00000	.01820	.86576
24	-.16924E+08	394.00000	.01788	.98364
25	-.08054E+07	392.00000	.01729	.50143
26	.01445E+06	301.00000	.01729	.51872
27	.96830E+07	423.00000	.01920	.53792
28	.18553E+08	399.00000	.01811	.55602
29	.27422E+08	427.00000	.01938	.57540
30	.35292E+08	445.00000	.02020	.59560
31	.43161E+08	448.00000	.02033	.61593
32	.51030E+08	463.00000	.02101	.63694
33	.62900E+08	482.00000	.02187	.65882
34	.71769E+08	542.00000	.02460	.68341
35	.80638E+08	625.00000	.02876	.71170
36	.89508E+08	546.00000	.02478	.73656
37	.98377E+08	531.00000	.02410	.76065
38	.10725E+09	422.00000	.01915	.77980
39	.11612E+09	325.00000	.01475	.79455
40	.12499E+09	277.00000	.01257	.79455
41	.13385E+09	253.00000	.01148	.80713
42	.14272E+09	250.00000	.01135	.81861
43	.15159E+09	243.00000	.01103	.82995
44	.16046E+09	244.00000	.01107	.84098
45	.16933E+09	225.00000	.01071	.85205
46	.17820E+09	199.00000	.00903	.86226
47	.18707E+09	202.00000	.00917	.87130
48	.19594E+09	228.00000	.00915	.88046
49	.20481E+09	184.00000	.00835	.89041
50	.21368E+09	146.00000	.00663	.89916
1	.22255E+09	125.00000	.00567	.90574
2	.23142E+09	70.00000	.00354	.91146
3	.24029E+09	81.00000	.00368	.91500
4	.24916E+09	67.00000	.00304	.91867
5	.25803E+09	60.00000	.00272	.92172
6	.26690E+09	54.00000	.00245	.92444
7	.27576E+09	74.00000	.00336	.92689
8	.28463E+09	63.00000	.00286	.93025
9	.29350E+09	68.00000	.00286	.93311
10	.30237E+09	73.00000	.00309	.93619
11	.31124E+09	65.00000	.00331	.93951
12	.32011E+09	64.00000	.00295	.94246
13	.32898E+09	56.00000	.00290	.94516
14	.33785E+09	51.00000	.00254	.94790
15	.34672E+09	66.00000	.00231	.95022
16	.35559E+09	70.00000	.00300	.95121
17	.36446E+09	56.00000	.00318	.95619
18	.37333E+09	46.00000	.00254	.95893
19	.38220E+09	48.00000	.00209	.96102
20	.39107E+09	41.00000	.00218	.96319
21	.40000E+09	42.00000	.00186	.96506
			.00191	.96696

TABLE 3-15. DISTRIBUTION FUNCTION OF THE FILTERED CROSS-CORRELATION SURFACE (Sheet 3 of 3)

INDEX	COEF	MIST	P-10H	CUM PROB
22	.4080E+09	51.00000	.00231	.96928
23	.4176E+09	52.00000	.00216	.97164
24	.42654E+09	48.00000	.00218	.97381
25	.43501E+09	56.00000	.00254	.97636
26	.44428E+09	55.00000	.00250	.97885
27	.45315E+09	65.00000	.00295	.98180
28	.45202E+09	68.00000	.00272	.98452
29	.47089E+09	49.00000	.00222	.98675
30	.47476E+09	35.00000	.00159	.98834
31	.4806E+09	32.00000	.00145	.98979
32	.4750E+09	41.00000	.00186	.99165
33	.50637E+09	23.00000	.00104	.99269
34	.51524E+09	13.00000	.00059	.99328
35	.52011E+09	17.00000	.00077	.99405
36	.53297E+09	14.00000	.00082	.99487
37	.54184E+09	15.00000	.00068	.99555
38	.55071E+09	27.00000	.00123	.99678
39	.55958E+09	33.00000	.00150	.99828
40	.56845E+09	25.00000	.00113	.99941
41	.57732E+9	11.00000	.00050	.99991
42	.58619E+09	2.00000	.00009	1.00000
COMPOSITE MEAN AND STANDARD DEVIATION				.3626052E+07
				.1900396E+09

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